



Handicrafts and Carpet
Sector Skill Council

Participant Handbook

Sector
Handicrafts and Carpet

Sub-Sector
Hand Crocheted Textiles

Occupation
Lace Crochet Maker

Reference ID: **HCS/Q7703, Version-
3.0 NSQF Level: 3**



**Hand Crochet Lace
Maker**

This book is sponsored by Handicrafts and Carpet Sector Skill Council

Sector Skill Council Contact Details:

Address: OCF, Plot No. 2, Pocket 9, Sector B, Vasant Kunj, New Delhi – 110070 Landmark – Behind JIMS

Phone: +91-11-26133165/26139834 - Fax: +91-11-26135519

Website: www.hcssc.in

Email: hcssc@hcssc.in

First Edition: June, 2022

Under Creative Commons License: CC-BY -SA

Attribution-ShareAlike: CC BY-SA



This license lets others remix, tweak, and build upon your work even for commercial purposes, as long as they credit you and license their new creations under the identical terms. This license is often compared to “copyleft” free and open-source software licenses. All new works based on yours will carry the same license, so any derivatives will also allow commercial use. This is the license used by Wikipedia and is recommended for materials that would benefit from incorporating content from Wikipedia and similarly licensed projects.

Disclaimer

The information contained herein has been obtained from sources reliable to Handicrafts and Carpet Sector Skill Council. Handicrafts and Carpet Sector Skill Council disclaims all warranties to the accuracy, completeness or adequacy of such information. Handicraft and Carpet Sector Skill Council shall have no liability for errors, omissions, or inadequacies, in the information contained herein, or for interpretations thereof. Every effort has been made to trace the owners of the copyright material included in the book. The publishers would be grateful for any omissions brought to their notice for acknowledgements in future editions of the book. No entity in Handicrafts and Carpet Sector Skill Council shall be responsible for any loss whatsoever, sustained by any person who relies on this material.



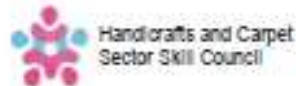


Shri Narendra Modi
Prime Minister of India

“

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

”



Certificate

COMPLIANCE TO QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS

is hereby issued by the

HANDICRAFTS AND CARPET SECTOR SKILL COUNCIL

for the

SKILLING CONTENT : PARTICIPANT HANDBOOK

Complying to National Occupational Standards of
Job Role/Qualification Pack: 'Hand Crochet Lace Maker' QP No. 'HCS/Q7703 NSQF Level 3'

Date of Issuance:

Valid up to: 27-06-2023

Valid up to the next review date of the Qualification Pack

Authorised Signatory
(Handicrafts and Carpet Sector Skill Council)

Acknowledgement

Handicrafts & Carpet Sector Skill Council (HCSSC) would like to express its gratitude to all the individuals and organizations who have contributed in the preparation of this trainee manual.

We would like to acknowledge the efforts put in by the HCSSC team, our Governing Body members along with our Industry Partners who collaborated in the preparation of the different modules. Sincere appreciation is also extended to all who provided subject matter inputs and review for the individual modules.

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 endeavors and help them make a bright career in the Handicrafts and Carpet Sector.

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



<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 'Hand Crochet Lace Maker' in 'Handicrafts' sector. All the activities carried out by a 'Hand Crochet Lace Maker' are covered in this course. Upon successful completion of this course, the candidate will be eligible to work as 'Hand Crochet Lace Maker'.

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 are:

- HCS/N7707: Prepare for making crochet lace for apparel, accessories and furnishing products
- HCS/N7708: Carry out the crocheting process for apparel, accessories and furnishing products
- HCS/N7709: Contribute to achieve quality in crochet lace making for apparel, accessories and furnishing products
- HCS/N9908: 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 Objectives



Exercise

Table of Contents

S. No.	Modules and Units	Page No.
1.	Introduction (Bridge Module)	1
	Unit 1.1 - Introduction	3
	Unit 1.2 – An Overview of the Handicraft Sector in India	6
	Unit 1.3 - History of Hand Crocheted Textiles	10
2.	Prepare for Making Crochet Lace for Apparel, Accessories and Furnishing Products (HCS/N7707)	16
	Unit 2.1 - Analyzing the Design and Preparing Raw Materials for Making Crochet Lace Apparel, Accessories and Furnishing Product	18
	Unit 2.2 - Tracing Pattern from the Master Pattern	40
3.	Carry out the Crocheting Process for Apparel, Accessories and Furnishing Products (HCS/N7708)	52
	Unit 3.1 Crocheting Process for Crochet Lace Apparel	54
	Unit 3.2 Crochet Lace Making Process for Accessories	60
	Unit 3.3 Crocheting Process for Crochet Lace Furnishings	68
	Unit 3.4 Crocheting Process with Special Features and Storage of Crocheted Products	75
4.	Contribute to Achieve Quality in Crochet Lace Making for Apparel, Accessories and Furnishing Products - (HCS/N7709)	82
	Unit 4.1 - Quality Checking of Raw Material	84
	Unit 4.2 - Work Safety Measures to Maintain Work Flow Process	90
	Unit 4.3 - Quality checking of crocheted lace	92
5.	Working in a Team (HCS/N9908)	98
	Unit 5.1 – Working in a Team	100
6.	Work Area Management (HCS/N9912)	107
	Unit 6.1 - Work Area Management	109
7.	Maintain Health, Safety and Security at Workplace - (HCS/N9913)	122
	Unit 7.1 – Safety, Health and Hygiene	124
	Unit 7.2 – Common Accidents and Prevention	141
8.	Annexure	154
	Annexure 1 Details of QR Codes Given in Units	155
9.	Employability Skills	

It is recommended that all trainings include the appropriate Employability skills Module.

Content for the same can be accessed here:

<https://www.skillindiadigital.gov.in/content/list>



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



<https://youtu.be/EFBcvdwYxZM>

Introduction to HCSSC Digital Initiative



Key Learning Outcomes

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

1. classify the crochet industry in India.
2. identify different crochet products.
3. identify the use of different tools and equipment used by a Hand Crochet Lace Maker.

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



<https://www.youtube.com/watch?v=CCwuLuftZko>

History of Hand Crocheted Textiles

Unit 1.1: Introduction

Unit Objectives

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

1. describe the scope and benefits of training programme
2. state National Occupation Standards and Qualification Pack.

1.1.1 Hand Crocheted Textiles in India

1.1.1.1 Hand Crocheted Textiles

India is one of the major exporter and supplier of handicrafts and gift products to the world market. The Indian handicrafts industry is highly labour intensive and decentralized, being spread all across the country in rural and urban areas. The sector is considered as the second largest employment-generating sector after agriculture with numerous artisans engaged in craft work on a part-time basis. The industry offers employment to over 6 million artisans, including a large number of women and people from the weaker sections of society. The present-day handicraft tradition of India is a perfect example of assimilation between the traditional designs and modern techniques. The fast-growing demand for Indian handicraft and gifts products has made this sector a full-fledged large scale organized industry that is growing day by day.



Fig. 1.1.1 Class room training

1.1.1.2 History

The rich history of India's craft tradition has evolved over the centuries offering a legacy of Indian culture promising everything - beauty, dignity, form and style. The variety is comprehensive and ranges from age-old stone carvings to modern handicrafts making use of glass flints and mirrors. The most popular crafts, include metalware, earthenware, pottery, sculpting, woodwork, hand-printed textiles, embroidered and crocheted goods, shawls, Zari products, stone carving and imitation jewellery. There is a myriad of art and craft traditions in India that depends on social, economic and regional factors. The present status of the sector in India owes much to the rich crafts history and tradition of the past. Majority of the crafts from the past continues to flourish due to their utilitarian characteristics, availability to the common people and popularity in domestic and global markets.

Today, some of the sectors within the craft industry have even become full-fledged industries in their own, like; carpet weaving, traditional textile (Banarasi silk sari, Chikankari etc), gem cutting and polishing, jewellery making, the world-famous diamond cutting and polishing industry, brassware, jute products, etc. The growth of these industries is due to their ever-increasing demand and the popularity of Indian crafts in the domestic market and overseas. Gems and jewellery, carpet making, metal ware, leather products, jute products etc. are some industries, which are growing rapidly.

1.1.2 Purpose of Training Programme

Training Programme

This training brings an opportunity to the trainees to enter the world of trending “Handicrafts and Hand Crochet Lace Maker” as a Lace Maker and enables practicing necessary skills in the Hand Crochet Textile Sector. In this process he/she can acquire enough national market ideas and eventually grow as an independent entrepreneur. The training includes an adequate practical exercise in the textile industry as well as in the sector. The training can extend from 6 to 8 weeks. Assessment carried out by each trainee results in qualified and certified worker who performs as a Hand Crocheted Lace Maker.



Fig. 1.1.2 Practical training

1.1.3 National Occupation Standard and Qualification Pack

Sector Skill Council (SSC) comprises well defined broad collection of skill domains of similar characteristics. Under SSC different sectors are identified with connected skills that are commonly required to do major activities in a set of organizations.

Each sub sector has significant Occupation Standards (OS). OS specifies the standards of performance than an individual must achieve when carrying out a function in the workplace. It includes the knowledge and understanding they need to meet the requirements of the standard consistently. Occupational Standards are applicable both in the Indian and global contexts.

QP comprises a set of NOS, together with the educational training and other criteria required to perform a job role. QP is assigned with a unique qualifications pack code. NOS is specific to Indian industries. Job role is defined as a unique set of functions that together form a unique employment opportunity in an organization. Different job roles are found in each NOS. The Qualifications Pack (QP) code relevant to the modules is HCS/Q7703. It has the following six applicable National Occupational Standards (NOS) which are of compulsory nature for this QP:

NOS code	Function /Task
1. HCS/N7707:	Prepare for making crochet lace for apparel accessories and furnishing products
2. HCS/N7708:	Carry out the crocheting process for apparel, accessories and furnishing products
3. HCS/N7709:	Contribute to achieve quality in crochet lace making for apparel, accessories and furnishing products
4. HCS/N9908:	Working in a team
5. HCS/N9912:	Maintain work area & tools
6. HCS/N9913:	Maintain Health, safety and security at workplace

Since this is a growing market with emerging technologies, this job role has more opportunities in the field. The training shall enable the trainee to get awareness and practice to Hand Crocheted Lace Maker.

After successful completion of training and passing the assessment, the candidate will be issued a certificate. The certificate will help the candidate to get employment and earn better wages than an untrained person.

Exercise



I. Answer the following questions.

1. What does a QP consist of?

2. What does NOS specify?

II. State whether the following statement is True or False.

1. This certificate will help you to get a job and earn better wages in the Hand Crochet textile industry.

True

False

Notes



Unit 1.2: An Overview of the Handicraft Sector in India

Unit Objectives

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

1. describe the various types of Handicrafts and their products in India.

1.2.1 Types of Handicraft Products

List of Handicraft Products

1. Art metal ware
2. Wooden art ware
3. Hand crocheted textiles
4. Embroidered goods
5. Marble and soft stone crafts
6. Papier-mâché craft
7. Terracotta Zari & Zari goods
8. Imitation and Fashion Jewellery
9. Leather Craft

1. Art metal ware

Metal work of India like enamelled, engraved and filigree cut work on silver and brassware are glory of India. Different categories of handicrafts that comes under art metal ware are brass metal ware of Moradabad, metal Bidri work and Dhokra of Andhra Pradesh, bell metal of Madhya Pradesh, etc.

2. Wooden art ware

Woodcraft of India is famous since centuries and thought to be one of the most primitive arts. Across India, different type of wood art is being practiced. Major producers are Kerala, Jammu & Kashmir, Uttar Pradesh and Assam. The most common varieties of wood used for craft are Teak, Sal, Oak, Ebony, Mango, Sheesham, etc. Saharanpur in Uttar Pradesh is famous for its wood works and also referred as “wood city of India”.

3. Hand crocheted textiles

India’s Textiles are known for its distinguished art, printed and dyed cotton cloth. For centuries its creative processes flourished as the fabric received royal patronage. Different types of hand printed textiles include kalamkari, tie and dye, block printing, etc. Major centres for tie and Dye are located in Gujarat (Jamnagar, Ahmedabad, etc) and Rajasthan (Jaipur, Jodhpur, etc).

4. Embroidered goods

Embroidery fabric and other goods are decorated using needle and yarn. Indian embroidered goods have its distinct and rich style. It includes Kashmiri work, Zardozi, Kasuti, Chikankari, Parsi work, phulkari work, etc are some of the designs being practiced in India. Key centres are Amritsar, Jaipur, Lucknow, Kashmir, Bikaner, etc.

5. Marble and soft stone crafts

Indian unique stone work is appreciated all around the world and can be seen in various historical buildings in India. Different types of stones like, marble, soapstone, sand stone are used by craftsmen in India. Few famous cities are Agra, Jodhpur, Chennai, etc.

6. Papier-mache craft

It is a unique craft that evolved during the Mughal period and today being practiced by a large number of artisans in India. A large variety of utilitarian items such as vases, houseboat models, as boxes, Samovar, etc are done in all shapes having bright colors.

7. Terracotta Zari & Zari goods

Terracotta are beautiful reddish colored glazed pottery with different designs. The art of molding terracotta objects was prevalent during the time of Indus Valley civilization. Variety of objects like lamps, drums, flower vases and musical instruments are prepared from clay. Different states have their unique Terracotta styles. Even clay color varies from place to place. Major states are Gujarat, West Bengal, Delhi, Rajasthan and Tamil Nadu.

8. Imitation and Fashion Jewellery

India is one of the major exporters in fashion jewellery. Indian jewellery considered to be highly artistic. The simple motifs are brought from local and developed into artistic patterns. Beside metal, lac is also extensively used for making attractive ornaments. Major centers are in Jaipur, Delhi, Gujarat, Moradabad, Sambhal etc.

9. Leather Craft

Leather is processed via various shaping techniques and coloring techniques to manufacture artistic leather goods. Leather craft is mostly practiced in Kolhapur, Kanpur, Indore, Barmer, etc.

1.2.1.1 Country-Wise Export of Indian Crafts

TABLE 1

Major buyers of Indian handicrafts	
Art Metalware	U.S.A., Germany, U.K. & Italy
Wood Wares	U.S.A., U.K., Germany & France
Hand printed Textiles and Scarves	U.S.A., U.K., Germany & Canada
Embroidered & Crocheted Goods	U.S.A., Saudi Arabia, U.K., Germany
Shawls as Artwares	Saudi Arabia, U.S.A. Japan & U.K.
Zari & Zari goods	U.K. U.S.A., Japan & Saudi Arabia
Imitation Jewellery	U.S.A., U.K., Saudi Arabia & Germany
Miscellaneous Handicrafts	U.S.A., Germany, U.K. & France

1.2.1.2 Art Concentration Areas

A comprehensive range of handicrafts and gift products are made all over India. Although it is quite difficult to limit a particular place for a specific craft, the following places are well known for their unique crafts.

TABLE 2

Comprehensive range of handicrafts and gifts products in India

Art Metalware	Moradabad, Sambhal, Aligarh, Jodhpur, Jaipur, Delhi, Rewari, Thanjavur, Mandap, Beedar, Kerala, Jagadhari and Jaisalmer
Wooden Artwares	Saharanpur, Nagina, Hoshiarpur, Srinagar, Amritsar, Jaipur, Jodhpur, Jagdalpur, Bangalore, Mysore, Chennai, Madras, Kerala & Behrampur (WB)
Hand printed Textiles and Scarves	Amroha, Jodhpur, Jaipur, Farrukhabad, Sagru & Sanganer
Embroidered Goods	Kutch (Gujarat), Jaisalmer, Baroda, Lucknow, Jodhpur, Agra, Amritsar, Kullu, Dharmshala / Chamba & Srinagar
Marble & Stone Craft	Agra, Chennai, Baster and Jodhpur
Terracotta	Agra, Chennai, Baster, and Jodhpur
Zari & Zari Goods	Rajasthan, Madras and Baster
Papier Machine Craft	Kashmir and Jaipur
Artistic Leather Goods	Indore, Kolhapur and Shanti Niketan (WB)
Imitation Jewellery	Delhi, Moradabad, Sambhal, Jaipur and Kohima (Tribal)

Exercise**I. Answer the following questions.**

1. What are the subsectors in handicrafts and hand crocheted textile Industry?

2. What are the types of handicraft products in crochet lace making?

3. List the name of popular city for producing hand crochet textiles and scarves in India.

II. State whether the following statements are True or False.

1. Papier machine craft is most popular in Jaipur and Kashmir.

True

False

2. Terracotta Zari and Zari goods are most popular in Rajasthan and Madras.

True

False

3. Embroidered goods are mostly produced in Jaisalmer and Srinagar.

True

False

Notes 

Unit 1.3: History of Hand Crocheted Textiles

Unit Objectives

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

1. describe the origin of crochet and crochet tailoring in India
2. describe the type of crochet products and their uses.

1.3.1 An Overview of Crochet Textile Industry

1. Crochet

The word crochet is derived from the Middle French word *croc* or *crochet*, meaning hook. It describes the process of creating fabric from a length of cord, yarn, or thread with a hooked tool. Crocheted fabric in the modern sense is begun by placing a loop on the hook, pulling another loop through the first loop, and so on to create a chain. The chain is either turned and worked in rows, or joined end-to-end and worked in rounds. Stitches are made by pulling one or more loops through each loop of the chain. This method distinguishes crochet from other methods of fabric-making as it is composed entirely of loops and is only secured when the free end of the strand is pulled through the final loop.

2. History of Crochet

Little is known of crochet's early history. It seems likely that the earliest crochet was made using fingers, rather than the hooks used today. There are theories that crochet could have existed as early as 1500 BC, as part of nun's work, which included needlepoint lace and bobbin lace. There are three main theories for the origin of crochet. Some believe that it originated in Arabia and spread eastward to Tibet and then westward to Spain, finally following the Arab trade routes to other Mediterranean countries. Alternatively, it's thought to have originated in South America, where a primitive tribe used crochet adornments in puberty rites. Another alternative stems from the fact that in China, early examples were known of dolls worked in crochet. However, there is no solid evidence as to how old crochet is or where it originated. The evidence of it appearing in the sixteenth century is rare and disputed. There are references to a type of "chained trimming" made around 1580. However, this appears to have been a type of cord, sewn onto fabric like an ornamental braid. During the Renaissance, women crocheted several strands of thread producing fabrics similar to lace.

The earliest evidence of crochet, as we know, is first commonly seen in the second half of the eighteenth century. Crochet may have been developed from Chinese needlework, an ancient form of embroidery known in Turkey, India, Persia and North Africa, which reached Europe in the eighteenth century, and was referred to as *tambouring*. The main theory behind the origin of crochet seems that it began when it was realized that chains worked in a pattern would hang together without background fabric. At the end of the eighteenth century, *tambour* evolved into what the French called *crochet in the air*, when the background fabric was discarded and the stitch worked on its own. *Tambour* hooks were as thin as sewing needles, and therefore the work must have been done with a very fine thread. Crochet began to emerge in Europe in the early nineteenth century, boosted by Eleanore Riego de la Branchardière, well known for her ability to take needle and bobbin lace designs and turn them into crochet patterns that could be duplicated. She published numerous patterns and also claimed to have invented lace-like crochet, today called as Irish crochet.

Some researchers believe that crochet originated in China as a type of needlework called “tambouring.” Though this was not used to create custom Afghan blankets and Afghan throws, as crochet is used today, its interlocking weaving of yarn could possibly have led the way for modern crochet. Instead of a hook, this craft used a thin needle that produced a tight weave. This may have been the origin from Afghans, with the delicate fabric leading the way for women to warm their children.

1.3.1.1 Globalization of Lace Industry

Lace is one of the hand-made ornamental fabric by looping, knotting, plaiting into specific patterns. Therefore, lace creation is the skill of using the techniques mentioned above to generate beautifully woven lace in different ways. A multiplicity of trimmings can be made with lace which includes bags, bed spreads, purses, clothing and many more varieties. However, these products are beautiful, attractive and help in a creative way providing, pleasing atmosphere in the homes as well as in the offices. Most of the home accessories are decorated with round or square lunch on sets, the tea tables with oval sets. There are also teapot covers with centres to match round tables which would be of high decorative value. On the other hand, particularly the lace product has its artistic based value. It can be used as an accessory to any kind of clothing to add elegance and style and hence highly preferred in the fashion technology and fashion shows. Here no machinery is involved in the manufacturing of lace products except a hooked needle. In this connection, the Lace creation is approved in putting-out system and workshop manufacturing. Underneath the putting-out system, women in the household prepare the lace items for the agent or middlemen who in turn hands over the lace items to the exporters. In this system there is no relationship between the exporter and worker and the entire relationship is carried-out between the agent and the worker. Exporter employs several agents who visits the artisans at certain intervals and gives them the thread and the designs for their customers who orders from abroad and after a certain time they will come to collect the finished articles. Women sometimes also do the finishing work-stretching, sorting out etc., of lace in the house of the exporters. The artisans are paid piece rates. Agents are engaged on commission basis.

1.3.1.2 Irish Crochet Lace Making

Irish Crochet Lace is a style of Irish lace which is generally considered allied to rather than a true lace. It was originally developed in mid-nineteenth century Ireland as a method of imitating expensive Venetian point laces. By 1845 it was being taught in the Ursuline Convent, Blackrock, Co. Cork. Within a few years it was being taught in almost every convent in the country and used as part of Famine Relief Schemes. By 1857, approximately 12,000 women were working in crochet. Charity groups sought to revive the economy by teaching crochet lace technique at no charge to anyone willing to learn. This type of lace is characterized by separately crocheted motifs, which were later assembled into a mesh background. Other types of Irish crochet include Rosslea and Clones lace.

Irish Crochet Lace is made with a very fine steel crochet hook and fine crochet cotton or linen thread. It begins with an outline of the pattern on a piece of cloth. Each motif is then crocheted separately, using cotton cord for volume and shaping. The finished motifs are then basted (sewn with a loose stitch for temporary tacking) onto a cloth in the shape of the pattern. The motifs are then joined using chains and picots. When all the motifs have been joined together to form one piece of lace, the basting stitch is removed from the back cloth, revealing the completed lace.

Irish Crochet Lace, particularly Cluny Lace, is experiencing a revival as modern designs are being created by Irish lacemakers as well as others such as Eastern European, Australian, Asian and North American designers. Máire Treanor organizes the annual Clones Lace Summer School in Clones, County Monaghan, as a gathering place for designers and students wishing to learn and preserve traditional patterns and share innovative ideas.

1.3.1.3 Crocheted Lace

Crochet lace is an application of the art of crochet. Generally, it uses finer threads and more decorative styles of stitching, often with flowing lines or scalloped edges to give interest. Variation of the size of the holes also gives a piece a “lacy” look. Originally crocheted lace was not regarded as true lace. Crocheting was considered as easy, and less time-consuming, but otherwise clearly inferior surrogate for “true” lace such as bobbin lace, needle lace or netting.

The first examples of crocheted lace tried to reproduce the products of other lace making techniques as faithfully as possible. Over time, there were many possibilities and inherent beauty of crocheted lace became more widely appreciated. Main styles of crocheted lace include filet crochet, Irish crochet and its modern derivatives, pineapple crochet. Freeform crocheted lace also exists, examples of which are pieces striving to imitate reticella lace.

1.3.1.4 Filet Crochet

Filet crochet is a type of crocheted fabric. This type of crocheted lace is like grid because it uses only two crochet stitches: the chain stitch and the double crochet stitch (U.S. terminology; known in some other countries as chain stitch and treble). Old filet patterns are used as a treble or triple stitch vertically but are also chained between two vertical stitches to prevent distortion of some patterns. Chain stitches use less yarn than double crochet stitches, which results in a visual difference in appearance between the two kinds of stitch. Filet crochet form pattern by filling in parts of a mostly chain stitch mesh with double crochet stitches.

Filet crochet is usually constructed from monotone crochet thread made of mercerized in white or ecru, and worked in rows. Filet crochet is used for decorative applications such as window curtains, tablecloths, and place settings such as coasters and placemats.

Filet crochet is most often worked from a graph or a symbol diagram. Patterns are created by combining solid and open meshes, usually working the design in solid meshes and the background in open meshes. The size of the space is determined by the number of chain stitches between each double stitch. Filet crochet may also be worked by alternating chain stitches with another type of crochet stitch such as (U.S. terminology) half double or triple crochet, and may be worked from yarn instead of thread.

1.3.1.5 Crochet Products

The product range that is offered consists of:

- Coasters
- Doilies
- Runners
- Curtains
- Bed Covers
- Pullovers
- Tops
- Handkerchiefs
- Table covers
- Bookmarks etc.

1.3.1.6 End-uses of Crochet

It was a common practice for groups of people to crochet clothing and other garments and then donate them to soldiers during the war. This practice continues even now into crocheting clothing and then donating it to hospitals, patients and for new-born babies. Sometimes groups does crochet for a specific charity purpose. It has also become popular to make crochet hats and donate them to cancer treatment centres, for those undergoing chemotherapy. During the month of October, pink hats and scarves are made and the proceeds are donated to breast cancer funds. A few organizations dedicated to using crochet as a way to help others include Knots of Love, Crochet for Cancer, and Soldiers’ Angels.

Crochet has been used to illustrate shapes in hyperbolic space that are difficult to reproduce using other media or are difficult to understand when viewed two-dimensionally. Mathematician Daina Taimina first used crochet in 1997 to create strong, durable models of hyperbolic space after finding paper models were delicate and hard to create. These models enable one to turn, fold, and otherwise manipulate space to more fully grasp ideas such as how a line can appear curved in hyperbolic space yet actually be straight. In the world of Fashion, Dutch designer Iris Van Herpen has made extensive use of crochet in her various collections.

1.3.1.7 Crochet and the Irish Connection

During the Great Irish Famine that decimated Ireland from 1845 to 1849, Ursuline Nuns there began teaching local women and children thread crochet. Items, these locals created were then shipped and sold in America and Europe, this was the advent of a style of crochet now commonly known as Irish lace which was probably instrumental in helping many Irish families survive the famine. A worldwide cottage industry began to develop around crochet, especially in Ireland and Northern France. Since these items were purchased by the emerging European middle class, the upper class began to label crochet as a cheap imitation lace only suitable for the masses and touted the older style of lace made by more expensive methods as being superior.

1.3.1.8 Crochet Connection with Goa

The Goa Crochet is very unique owing to the fact that it has a lot of Portuguese influence as a local favor of Goa. The designs that these artisans follow haven't been listed or published anywhere and are often passed down generation to generation. Often, we observe that the 4th or the 5th generation of a family continues indulging in the art of crochet. It has become a way of life for the Goan community and crochet is a legacy of their rich culture and heritage.

Exercise



I. Answer the following questions.

1. What is crochet?

2. What is the use of crochet?

3. List the name of various crochet products.

4. List the major buyers of Indian handicrafts.

II. State whether the following statements are True or False.

1. Lace is one of the hand-made ornamental fabric by looping, knotting, plaiting into specific patterns.

True

False

2. Filet crochet is used for decorative applications such as window curtains, tablecloths, and place settings such as coasters and placemats.

True

False

3. Irish Crochet Lace is made with a very fine steel crochet hook and fine crochet cotton or linen thread.

True

False

4. Lace is one of the Hand - Made ornamental fabric.

True

False

Notes 

2. Prepare for Making Crochet Lace for Apparel, Accessories and Furnishing Products



Unit 2.1 – Analysing the Design and Preparing Raw Materials for Making Crochet Lace for Apparel, Accessories and Furnishing Products
Unit 2.2 – Tracing Pattern from the Master Pattern



Key Learning Outcomes



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

1. identify the requisites for the given design.
2. perform preparatory activities for making crochet lace.
3. finalise design template for further usage.
4. identify the various tools and materials used for crocheting.
5. learn the description and features of the tools and materials.

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



https://www.youtube.com/watch?v=Do3o_eGknVE

Prepare for Making Crochet Lace for Apparel, Accessories and Furnishing Products

Unit 2.1: Analysing the Design and Preparing Raw Materials for Making Crochet Lace for Apparel, Accessories and Furnishing Products

Unit Objectives

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

1. Analyse and interpret the design to be developed
2. Identify the required tools and materials as per the design
3. Identify the different patterns and types of crochet to be used as per the design
4. Identify the different types of crochet stitches.

2.1.1 Tools and Materials to be Used in Crocheting

2.1.1.1 Tools used in Crocheting

1. Crochet Hooks
2. Hand Scissor
3. T-Pin
4. Yarn Needle
5. Tape Measure
6. Gauge Ruler
7. Split marking
8. Tapestry needle

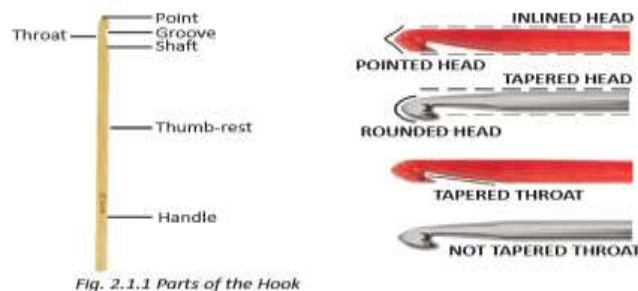


Fig. 2.1.1 Parts of the Hook

1. Crochet Hooks

- It is Commonly made up of plastic, aluminium, steel, tortoise shell, bone, or wood and are available in many sizes. Some are as fine as a pin head.
- Others are as fat as a broomstick.

1.1 Parts of the Hook

a) Point

- This is the part of the crochet hook that pokes into the stitch while crocheting.
- The point can range from very pointed to rather dull (rounded).
- It is also called as 'tip'.

b) Groove

- The groove is the indentation that catches the yarn, pulls it through a stitch.
- Grooves can be either deep or shallow, although there no is standard way to 'measure' the 'groove depth'.

c) Throat

- The throat is the part of the hook where the loop transition from being caught in the groove to its resting place on the shaft.
- Throats can be either 'inline' or 'tapered'.
- This is perhaps one of the most salient features of a hook, and the throat style is often described on the package.

d) Shaft

- The shaft is the part of the hook that the loop rests on while crocheting.
- It is the part of the hook that determines the size of the stitches.

e) Thumb rest

- It's an optional indentation that allows resting the thumb on the hook.

f) Handle

- The handle is the part of the hook that holds while crocheting.
- Handles are usually made from the same material as the rest of the hook, but some styles of hook feature ergonomic or comfort handles.

Hook Types and Construction

Crochet hooks are typically divided into two primary categories, based on the diameter of the hook shaft. You can find hooks ranging from a fraction of a millimetre in diameter up to hooks larger than the finger. Depending on the size, a hook can be sorted into two primary categories:

Standard

These hooks are typically used when crocheting with yarn, and they range from 2mm up to 20mm in diameter.

Steel

These hooks are smaller and generally used when working with crochet thread, size 10 and smaller. But Other than steel, standard hooks can be made of different materials including aluminium, plastic, and even wood.

Aluminium

These hooks are lightweight and smooth, helping to work with the yarn quickly and without interlocking them. Aluminium hooks are some of the easiest to find and are often coated in a spectrum of colours.

Plastic

These hooks are also lightweight, but they can feel sticky to work with. While inexpensive, some crocheters feel the grip of plastic slows them down.

Wood

Crochet hooks can be made out of hard woods such as ebony, rosewood, and oak with fine woodworking techniques. These hooks are beautiful to look at and when made properly can be pleasant to using the aluminium workhorse. Mostly, the hook is generally 5 to 6 inches long and falls into one of the above categories.

Afghan hooks

These hooks range from 12 to 16 inches in length, with a hook at one end and a knob at the other end. These hooks are used for Afghan or Tunisian stitches that require you to keep more than one loop on the hook shaft.

Double ended crochet hooks

They are also long like Afghan hooks; these tools have a hook at each end. They are used for something called double ended crochet, which makes a thick and reversible fabric.

Size

There are two separate sizing categories when it comes to hooks, one for standard hooks and one for steel hooks.

Selecting the Right Size of Hook

Selecting hook size is important because, it must suit the type of yarn used, and also the size of the stitch it creates, which determines the gauge.

- The gauge, in turn, determines the final size of the design.
- Hooks come in a wide range of sizes and are labelled accordingly
- The labels are sometimes embossed on the side of the shaft.
- Hooks with padded or "comfort" grips may display this information on the grip.
- These hooks range from the smallest fraction of a millimetre to about 2 millimetres in diameter.
- Table gives the most common sizes for steel crochet hooks and standard crochet hooks.
- The larger the number, the smaller the hook in English count.

Table 1

Steel hook sizes		
U.S.	ENG.	METRIC
00	-	3.5
0	0	3.25
1	1	2.75
2	1 1/2	2.25
3	2	2
4	2 1/2	2
5	3	1
6	3 1/2	1
	4	1.65
8	4 1/2	1
9	5	1
10	5 1/2	1
11	6	1
12	6 1/2	1
13	7	.
14	-	.75

Table 2

Aluminum hook sizes		
U.S.	ENG.	METRIC
-	14	3.5
B/1	13, 12	3.25
C/2	12, 11	2.75
D/3	10	2.25
E/4	9	2.
F/5	8	2.
G/6	7	1.
H/8	6	1.
I/9	5	1.65
J/10	4	1.
K/10	2	1.
-	-	1.
L/11	-	1.
M/13	-	1.
N/15	-	.8
P/16	-	
Q	-	
S	-	.75

Table 3

Crochet gauge and hook size		
Yarn derivative	Types of Yarn	Crochet Gauge/Hook Size
Lace	Lace weight	32-42 sts to 4" on 6-8 steel or B-1 hook
Super fine	Sock, fingering	21-32 sts to 4" on US B-1 to E-4 hooks
Fine	Sport, baby	16-20 sts to 4" on US E-4 to 7 hooks
Light	DK, Light Worsted	12-17 sts to 4" on US 7 to I-9 hooks
Medium	Worsted, Aran	11-14 sts to 4" on US I-9 to K-10.5 hooks
Bulky	Chunky, Bulky	8-11 sts to 4" on US K-10.5 to M-13 hooks
Super Bulky	Bulky, Roving	7-9 sts to 4" on US M-13 to Q hooks
Jumbo	Jumbo, Roving	6 sts or less to 4" on US Q and larger hooks

2. Hand Scissor

A small pair of blunt-end scissors in good condition is preferred.

3. T pins

Used for blocking and securing pieces of product together when joining or measuring is done. Nickel-Plated Steel. Packed 1/2 lb. per box. 25 lb. per carton.



Fig. 2.1.2 Hand Scissor



Fig. 2.1.3 T pin

4. Yarn needle

- Made of plastic or metal with a blunt point and large eye.
- It is used to hide loose ends when joining yarn or when product is finished.

Table 4

Size	Length	Wire dia	per pound
16. 1"	(25 mm),	0.030"	3125
20. 1 1/4"	(31 mm)	0.036"	1897
24. 1 1/2"	(38 mm),	0.0455"	969
28. 1 3/4"	(44 mm),	0.0455"	873
32. 2"	(51 mm),	0.0455"	725

5. Tape measure

Generally used to measure "you" and/or length and width of product as you establish the gauge needed by the pattern.

6. Gauge ruler

A 2-inch L shaped window item that allows you to measure the number of stitches and rows in an inch.



Fig. 2.1.4 Yarn needle



Fig. 2.1.5 Tape Measure

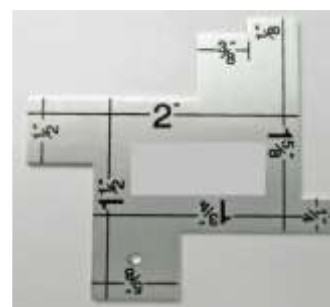


Fig. 2.1.6 Gauge ruler

7. Split markers

- Round plastic spiral markers that slip into crochet work.
- They are used to indicate a certain point in crocheting such as joining continuous rounds, increasing points or decreasing points.



Fig. 2.1.7 Split markers

Small note pad and pencil

- Useful to help you keep track of what row or round you are crocheting.
- The numbers of times you have repeated stitches when part of the instructions in a row are to be repeated.

Container to hold the above

Pencil box, eyeglass case, and travel toothbrush holders make good containers for hooks, scissors, and yarn needles.

A film container will hold split markers.

8. Tapestry needle

- A blunt-pointed tapestry needle is used for sewing seams.
- A straight, steel needle is best. Some tapestry needles have a “hump” around the eye.
- They are not good for joining seams in crocheting as the hump catches on stitches and makes it hard to pull the yarn through.



Fig. 2.1.8 Tapestry needle

2.1.1.2 Materials Used

Yarn

- Yarns are available in a variety of weights (thickness of the strands) and fibre contents.
- Make sure they have similar washing instructions.
- Care instruction is found on the product label, follow them carefully.
- Always make sure to make a swatch to measure the gauge.

1. Two Types of fibres used in crochet yarn

- Natural fibres
- Synthetic fibres

Wool: Wool (made from the fleece of sheep) is the queen of yarns, and it remains a popular choice for knitters.

Here are some of the wool yarn options:

Lamb's wool: Comes from a young lamb's first shearing.

Merino wool: Considered the finest of the fine breeds.

Pure new wool/virgin wool: Wool that's made directly from animal fleece and not recycled from existing wool garments.

Shetland wool: Made from the small and hardy native sheep of Scotland's Shetland Islands.

Icelandic wool: A rustic, soft yarn.

Washable wool: Treated chemically or electronically to destroy the outer fuzzy layer of fibres.

Fleece: Examples include mohair and cashmere, which come from Angora and Kashmir goats, respectively. Angora comes from the hair of Angora rabbits.

Silk, cotton, linen, and rayon: The slippery, smooth, and often shiny yarns.

Synthetic: Includes nylon, acrylic and polyester.

2. Types of Thread

- Threads are also used to do crocheting.
- Crochet thread is generally used for dollies, table cloths, table toppers or as an edge on a product.
- The most commonly used thread is a number 10 size thread.
- The larger the thread number, the finer the thread, so 20 is finer than 10, and 30 is finer than 20.
- A "0" hook works well with a size 10 thread.

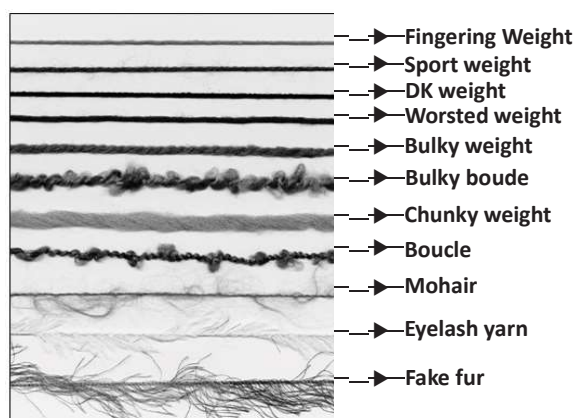


Fig. 2.1.9 Type of Thread

3. Types of Yarn Packaging

- **Ball:** Yarn wrapped into a ball shape.
- **Skein:** Yarn wrapped in a loose twist. Yarn packaged as balls and skeins come ready to knit.
- **Hank:** Yarn wound into a large circle and then folded.

4. Selecting yarn

- Select good quality yarn and thread for the crochet lace because it will affect the appearance of the finished work. Good quality yarns and threads have firm twist, resiliency, and even thickness or consistency of texture. ("Resiliency" means the yarn will spring back in the place when stretched.)
- Always buy enough yarn or thread to make a complete garment or article. Purchase yarn or thread with matching colour numbers and dye lots. Sometimes the yarn will say "no dye lot" in which case, do not worry about this aspect of selecting yarn.
- Use the type of yarn based on the pattern instructions. Pattern instructions are written for the particular type of yarn listed. Sometimes you can use a yarn conversion chart to substitute a different yarn. It is important that the substitute yarn or thread meets the gauge.
- Follow the correct blocking procedures for each type of yarn chosen for a product. The fibre content of the yarn determines the blocking method to be used. Read the yarn label for blocking instructions.

Table 5

Size Conversions Length				Size Conversions Weight			
Inches (in)	12 in	=	1 ft	Ounces (oz)	16 oz	=	1 lb
Feet (ft)		=	1 yd	Pounds (lb)	2000 lb	=	1 t
Yards (yd)		=	1 mi	Tons (t)	1 t	=	2000 lb
Miles (mi)		=	5280 ft				

5. Yarn Color

- Choose and coordinate colors/hues with intensities that look nice together. Generally speaking, the brighter the intensity, the smaller the amount of the color needed. Example: bright pink (bright intensity), dusty rose (dull intensity), and leaf green (semi-dull intensity).
- Choose no more than five colors for a single product. One to three colors are usually best, depending on the article being made and its use. An odd number of colors are better than even number of colors in the product. Example: red, white, and blue.
- Varied the number of colors in the product have one color family or hue as the chief color. Varying the amount of color will make the product more interesting.
- Black, gray, and white are considered neutral colors. They can be included in a color scheme without upsetting the color formula. Black and white are often used as accents.

Remember good quality yarn should have:

Even colour throughout the skein.

A firm twist so it will not separate easily when crocheting.

Even thickness throughout the yarn to insure even stitches in the product.

Resiliency so it will spring back when stretched or squeezed.

6. Yarn Labels

Read the label to ensure that the yarn for the product is purchased correctly.

Check dye lot numbers. A slight difference in the color might not be noticeable until after the product is completed.

Keep the label, it has directions for the care of the product after it is finished.

Follow these directions carefully to ensure that the product looks best.

Exercise



I. Answer the following questions.

1. Convert 30 inches to.....feet.

2. What is yarn label?

3. List the name of tools is used for hand crochet lace making?

4. What are the materials is used for crochet lace making?

5. What are the type of yarn is used for crochet lace making.

6. What are the colors is used for yarn making?

II. State whether the following statements are True or False.

1. T pins are used for blocking and securing pieces of product together when joining or measuring.

True False

2. Split marker is used to indicate a certain point in crocheting such as joining continuous rounds, increase points or decreasing points.

True False

3. A blunt-pointed tapestry needle is used for sewing seams.

True False

4. Wool (made from the fleece of sheep) is the queen of yarns, and it remains a popular choice for hand knitters.

True False

5. Crochet thread is generally used for dollies, table cloths, table toppers or as an edge on a product.

True False

6. Skein is the yarn wrapped in a loose twist. Yarn packaged as balls and skeins which come ready to knit.

True False

7. Hooks are commonly made from plastic, aluminium, steel.

True False

8. Split markers indicate a certain point in crocheting such as joining continuous rounds, increasing points or decrease points.

True False

2.1.2 Gauge in Crochet

2.1.2.1 Gauge

Gauge is just a measure of how big the stitches are. Gauge has two parts: stitches and rows. This means gauge is measured both on the width of the stitches and the height of the stitches.

It will typically be written as:

- Gauge: stitches and rows = 4 inches (10.16 centimetres)
- stitches and rows in single crochet = 4 inches (10.16 centimetres)

2.1.2.2 How to calculate yarn yardage

1. Make a test square

- Start by making a test square for each of the most used stitches in the pattern.
- Mostly crochet is a test square that are 10 stitches wide & 10 rows high.
- In that way check the gauge for the pattern.

2. Measure how long 10 stitches are

- Check how much yarn that last 10 stitches made which contains in a tape measure (use yards/inches/meters/cm).
- Pull out/frog the stitches & measure the length.

3. Calculate how long 1 stitch is

- Make a list of how many different stitches is used for the pattern & how long 10 stitches of each is.
- Then divide by 10 to know how long 1 stitch is. Preferably in inches or cm, then it will need to convert back to yards or meters.

4. Calculate how many stitches the crochet pattern contains

- Read the pattern in detail to figure out how many stitches (of each stitch type) there is in each row, & multiply by the number of rows. Then you have the number of stitches.

5. Calculate how much yarn will be needed for each stitch

- Use the length of each stitch & multiply it with the total number of stitches in the crochet pattern (repeat for each stitch that is frequent in the pattern).

6. Add together how much yarn in total

- Add together how much yarn each of the stitch requires & the total cm or inches of yarn needed.
- Convert the cm or inches to yardage/meters needed for the crochet pattern. Most yarn labels give the amount of yarn in yards, meters or both.

7. Calculate how many skeins of yarn you'll need

- The total yards/meters of yarn needed for the crochet pattern, is divided by the length given on the yarn label to figure out how many skeins of yarn is needed.

8. Compare to suggested yarn amount for the crochet pattern

- Check whether the calculated yardage for the whole crochet pattern is close to or similar as the suggested amount for the crochet pattern.

2.1.2.3 Factors influencing gauge uniformity

- Gauge refers to the number of stitches and the number of rows present in a specified number of inches.
- Gauge is the basic unit which determines the finished size and fit of the product.

Hook size, type and size of yarn are usually suggested by the crochet pattern and using these sizes helps to achieve the desired gauge.

In addition to hook size and yarn, the amount of tension applied to the yarn/thread and the own rhythmic crochet technique also influence gauge. Tension and rhythm, which are gained through practice, varies from person to person.

Tension is the tightness or looseness of crocheting. It is controlled by the resistance of the yarn as it passes through the fingers. Some people naturally “work loose,” while others “work tight.” Learn to control the tension so the stitches are loose enough for the hook to pass through them easily.

Rhythm—uniform tension—is achieved through practice. It is the flow of the hand movement from stitch to stitch.

With practice, the rhythm will become steady and smooth, helping to achieve even tension.

2.1.2.4 Checking the Pattern Gauge

The crochet pattern will indicate the type of yarn and hook size and the crochet instructions will specify the gauge of the pattern. Based on the above instructions prepare a swatch. Follow the instructions given below to check the gauge.

- After finishing the practice swatch, place it on a flat surface.
- Use a gauge ruler with a 2-inch L-shaped window which makes it easy to count stitches and rows. However, simple counting of stitches and rows will also work.
- Do not measure from edge to edge, but start counting a few stitches in from the edge and count the number of stitches/rows along the 2-inch ruler.

Correcting the gauge

Do not be upset if the gauge is different from the pattern gauge given in the crochet instructions. Gauge is simple to adjust

- Simply use a large or smaller hook to achieve the proper gauge.
- Changing to a smaller size hook will increase the number of stitches per inch.
- A larger hook will decrease the number of stitches per inch.
- Use the right size hook that gives the correct gauge for the pattern.

Exercise



I. Answer the following questions.

1. What is gauge?

2. What are the unit used to measure yarn and stitches?

3. How to calculate how many stitches, in a crochet pattern contains?

4. How to calculate skeins of yarn?

5. What are the techniques used for checking the pattern gauge?

II. State whether the following statements are True or False.

1. Gauge is the number of stitches (and spaces) per inch and the number of rows (or rounds) per inch.

True

False

2. Tension and Rhythm determines the uniformity of gauge.

True

False

Notes 

2.1.3 Hold the Yarn and Crochet Hook

2.1.3.1 Holding the Crochet Hook

1. Over the hook position

- Position the dominant hand over the hook with the handle resting against the palm and the thumb and index finger grasping the thumb rest.
- View the over-the-hook position for both left-handed and right-handed crocheting:

2. Under the hook position

- Hold the hook as you would a pencil with the thumb rest between the fore finger and thumb.
- You can see how both lefties and righties work the under-the-hook position:

3. Hold the Yarn and Crochet Hook

- The hook is held in the right hand as if holding a pencil. It is called Pencil grip.
- The hook is held in the right hand as if holding a dinner knife ready to cut.
- To maintain the slight tension in the yarn necessary for easy, even stitches to wrap the yarn around the fingers of the hand opposite the one holding the hook.
- The left hand holds the crochet work and at the same time controls the tension of the yarn.
- The left-hand middle finger is used to manipulate the yarn, while the index finger and thumb hold on to the work.



Fig. 2.1.10 Over the hook position



Fig. 2.1.12 Pencil grip position

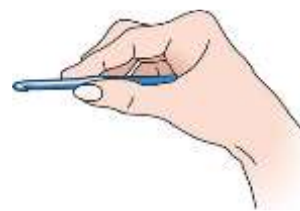


Fig. 2.1.13 Holding of dinner knife position

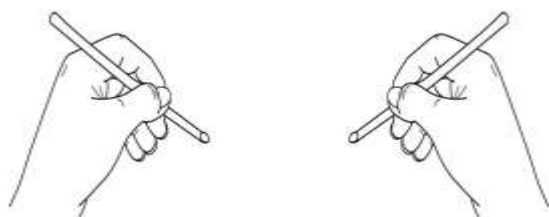


Fig. 2.1.11 Under the hook position



Fig. 2.1.15 Finishing of loop

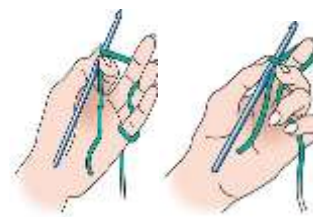


Fig. 2.1.14 Wrap the yarn around the fingers

Work Instructions

Step 1 Form a loop about 6 inches from the end of the yarn.

Step 2 Pick-up hook and hold it as you would hold a pencil or hold the hook in a manner which is comfortable.

2.1.4 Slip Knot and Chain Stitch



At the end of this exercise, you will be able to:

1. practice crochet begins with a slip knot
2. pick up and hold the crochet hook
3. hook the loop into another loop.

Tips

All crochet begins with a slip knot and then make a chain stitch. The knot and stitch is used as a foundation or base for other stitches, to start a new row and/or to form pattern stitches.

Step 3 Hook another loop through the loop you have already formed.

Step 4 Pull the knot close to the hook, but not so tight it will not slide on the hook.

Step 1 Holding the hook with the slipknot in the right hand, thread yarn around the fingers of you left hand.

Step 2 Yarn over (yo) and draw yarn through the loop on the hook. This makes one chain.

Step 3 Repeat Step 2 until you have the number of stitches needed. Practice until the chain stitches are about the same size and not tight.

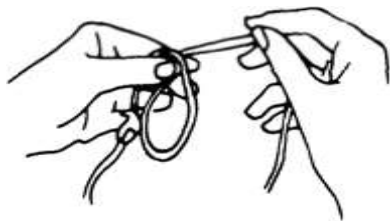


Fig. 2.1.16 Formation of loop



Fig. 2.1.17 Pick-up and hold the hook

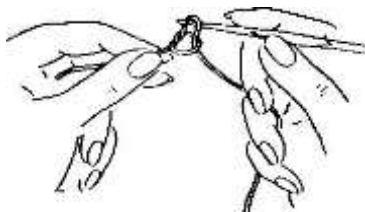


Fig. 2.1.18 Hook the loop inside another loop



Fig. 2.1.19 Pull the knot close to the hook

2.1.5 Making a Chain Stitch

At the end of this exercise, you will be able to:

1. prepare a chain stitch crochet
2. hold the hook with the slipknot
3. make a chain stitch crochet.

Step 4 After making several chain stitches, look at the chain. The front of the chain has a series of V's coming out of each other.

The back has raised loops in the centre. Unless the pattern gives other instructions, always crochet in the front of the chain.



Fig. 2.1.20 Holding the hook with the slipknot



Fig. 2.1.21 Yarn over and draw yarn through the loop

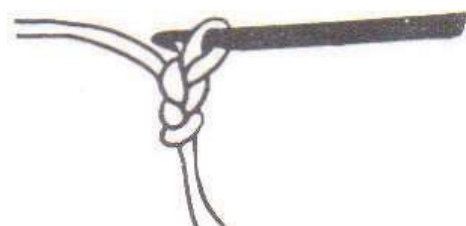


Fig. 2.1.22 Formation of group of stitches



Fig. 2.1.23 Making of chain stitches

2.1.6 Basic Crochet Stitches

2.1.6.1 Single Crochet (SC)

The single crochet stitch is the shortest and most compact of the basic stitches as follows;

- Prepare 11 chain stitches (ch 11).
- Insert the hook in the second ch from hook, under the top two threads as shown.
- Wrap the yarn over (yo) hook.
- Draw through stitch. There are now two loops on hook.
- Yo and draw yarn through two loops on hook. One loop remains. You have completed one single crochet (sc) stitch (st).
- Repeat steps 2 through 5 in each chain stitch. You will have 10 sc stitches.
- To crochet another row, ch 1 and turn the work around so the reverse side faces you. The chain at the end of the row is called the turning chain. You always make a turning chain at the end of a row unless directions instructed otherwise.
- To crochet another row, Insert the hook in the first st, under the top two yarns and continue following Steps 2 through 4. Count the stitches. You should have 10 sc stitches.

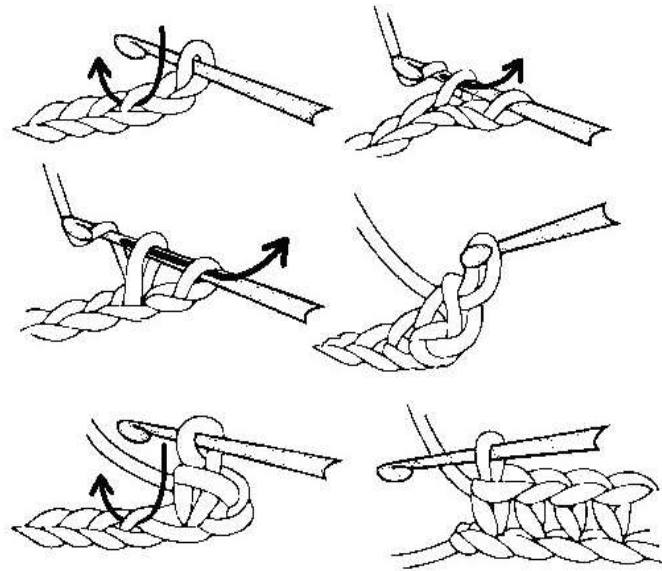


Fig. 2.1.24 Step of single crochet formation

2.1.6.2 Double Crochet (DC)

The double crochet stitch is taller and creates work that is more open and lacy- like done in a sc stitch as follows;

- Prepare 12 Chain stitches (ch 12).
- Yo and insert the hook under 2 loops in the fourth chain from the hook.
- Yo over and pull through. You have 3 loops on hook.
- Yo and pull through 2 loops.
- Yo and draw through the remaining 2 loops. One loop remains on hook. 1 dc stitch completed.
- Repeat Steps 3 through 5 to the end of the row, ch 3, and turn.
- The turning chain counts as a dc stitch.
- Insert hook in the next stitch (under the top two loops) to make the next dc.

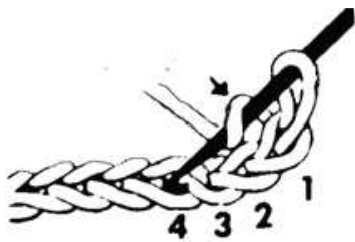


Fig. 2.1.25 Yarn over and insertion of hook



Fig. 2.1.26 Yarn over and pull through 3 loops



Fig. 2.1.27 Yarn over and pull through 2 loops



Fig. 2.1.28 Double crochet stitch



Fig. 2.1.29 Repetition of steps

2.1.6.3 Half Double Crochet (HDC)

The half double crochet stitch is taller than a single crochet stitch but not as tall as a double. It makes a firm textured fabric as follows;

- Prepare 12 Chain stitches (ch 12).
- Yo and insert the hook in the third ch from hook.
- Yo and pull through. There are 3 loops on the hook.
- Yo and pull through all 3 loops. Half double crochet stitch is completed. Repeat Steps 2 through 4 across chain to the end.

There are 10 hdc sts.

- Ch 2 turn, yo and insert hook in the second stitch under the top two loops, yo, draw through all three loops. Repeat across row to end. There are 10 hdc sts. (CH 2 counts as a HDC)

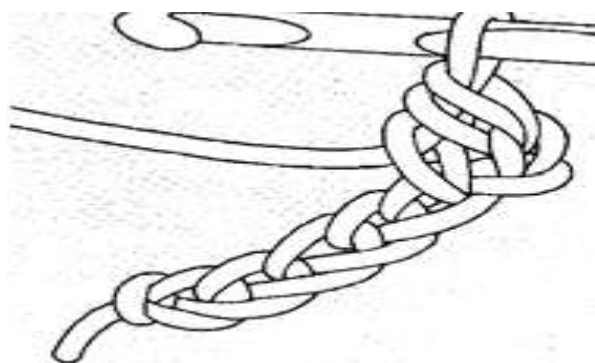


Fig. 2.1.30 Yarn over and pull through

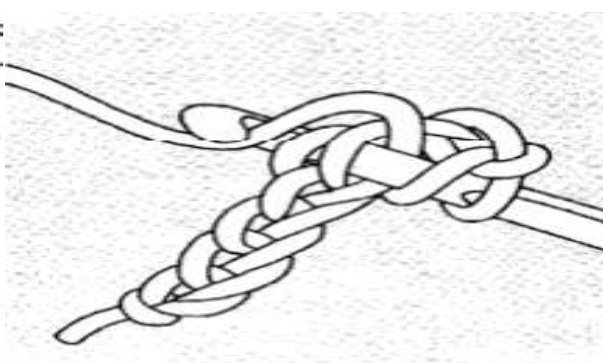


Fig. 2.1.31 Half crochet stitch

2.1.6.4 Treble Crochet (TR)

Sometimes called triple stitch, the treble stitch is taller and more open than a double stitch. It is a continuation of the double crochet stitch as follows;

Prepare 14 Chain stitches (Ch 14)

- Yo hook twice; insert hook under two loops of the fifth chain from hook.
- Yo hook and draw up a loop. There are four loops on the hook.
- Yo hook and pull through two loops. Yo hook again and pull through two loops.
- Yo hook and pull through remaining two loops.
- There should be only one loop on the hook. The treble stitch is complete.
- Repeat Steps 2 through 6 until row is complete. When turning for the next row, chain four, yo 2 times and insert hook in 2nd st, complete as before to finish treble stitch. Turning chain counted as a treble stitch.

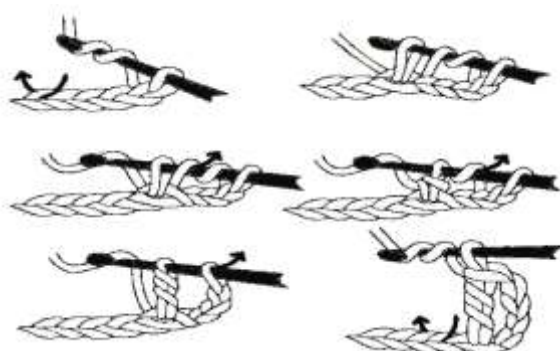


Fig. 2.1.32 Steps involved to making of treble crochet stitch

2.1.6.5 Other Stitches

- Sometimes pattern directions tell you to use a different technique while crocheting the basic stitches. Usually, you insert the hook under two loops of a stitch or in a stitch or space.
- Sometimes you are told to use one loop only or to work in the post. Below are explanations of other terms you may encounter.

1. Front Loop Only (FLO)

Crocheting in the front loop only forms a ridge on the back of the work. This is done simply by inserting the hook in the front loop only (loop closest to you) to create the stitches.

2. Back Loop Only (BLO)

Crocheting in the back loop only forms a ridge on the front of the work. This is done simply by inserting the hook in the back loop only (the loop farthest from you) to create the stitches.

3. Front Post Double Crochet (FPDC)

- This stitch is worked in the row below. Yarn over and insert hook from front to back around post in the stitch below.
- Complete the double crochet stitch as usual. This can also be worked as a treble stitch.

4. Back Post Double Crochet (BPDC)

- This stitch is worked in the row below. Yarn over and insert hook from back to front around post in the stitch below.
- Complete the double crochet stitch as usual. This can also be worked as a treble stitch, also.

5. Changing Yarn Colors

- Whether you use rows of colors or different colors in a row, changing yarn colors will create an interesting design and add variety to the product.
- Motifs provide an excellent opportunity to use different colored yarns. To change the color, use the same technique as for attaching a new yarn.
- Crochet instructions will indicate where to change colors.
- Sometimes during color change, the instructions provided will specify you to work over the color not in use or to work over cut yarn ends.
- To do this, lay the main color yarn end along the top of the previous row.
- Resume crocheting with the contrasting color yarn, working over the main color yarn while making stitches.
- The main color yarn will be “enclosed” as the new stitches are completed.



Fig. 2.1.33 Front loop



Fig. 2.1.34 Back loop



Fig. 2.1.35 Front Post Double Crochet (fpdc)

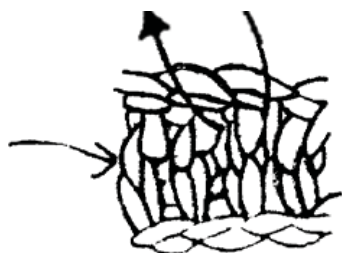


Fig. 2.1.36 Back Post Double Crochet (bpdc)

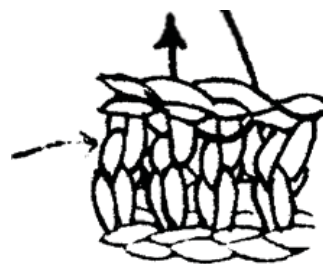


Fig. 2.1.37 Changing Yarn Colors in rows

6. Attaching New Yarn Color

1. Work the last stitch until 2 loops remain on hook. Leave a 6-inch tail of the new yarn and finish the stitch by drawing a loop of the new yarn through the 2 loops on the hook.
2. Keep both short yarn ends on the wrong side.
3. Continue crocheting using the new yarn.
4. After crocheting 6 or 7 stitches, check the tension where the yarn was joined.
5. Follow the instructions for hiding ends of the yarn.

7. Carrying Color

- Advanced crochet may choose a pattern that uses several colors in a row.
- These colors should be carried along the wrong side of the row or crocheted over when not being used.
- Bobbins can also be used, and follow instructions given by the pattern.

2.1.6.6 Joining Using Seam

1. To sew a whip stitch seam

- Place two motifs on top of each other, right sides together. Thread a large, blunt-pointed tapestry needle with yarn that matches the yarn in the motif.
- Starting at a corner, attach the yarn securely by taking two overhand stitches through a crochet stitch on the outermost edge of the top motif. Continue to whip or overcast the edges of both motifs together by picking up one stitch from the edge of each motif.
- Continue sewing until you reach the next corner. Secure yarn again by stitching into the corner stitch with two stitches. Cut the yarn, leaving 6-inch tail to fasten and hide.
- Once several individual motifs are joined, a long edge • may be stitched together without having to cut the yarn and fasten ends.
- When stitching seams longer than 4 inches, stretch seam slightly to give it some elasticity.
- Practice joining motifs using the whip stitch seam technique until the stitches are even and the seam looks smooth.

2. Single Crochet

- A single crochet seam produces a raised decorative seam.
- It can be used for joining motifs and as an edge finish around a vest.
- It can be highlighted using a contrasting color yarn.

To form a single crochet seam

- Place sections wrong sides together. Working through both thicknesses, insert the hook through the first stitch or space after a corner. Catch the yarn; then draw it through both layers forming a loop on the hook.
- Catch the two strands of yarn in back (yarn end and working length of yarn), and draw them through the loop.
- With the single strand of working yarn, continue in single crochet along the edge. Let the yarn end lie along the edge and work over it.

3. Backstitch Seam

The backstitch seam is sometimes used when joining crocheted sections. The seam created is slightly less bulky than the single crochet seam but somewhat bulkier than the woven seam.

To sew a backstitch seam

- Pin pieces to be joined with right sides together. Adjust crochet patterns of the two pieces as well as the length of the seam.
- Using a blunt-pointed tapestry needle thread with matching yarn, secure the thread at one end with a few whip or overhand stitches.
- Take stitches through both layers of work, making stitches approximately 1/8 to 1/4 inch in length close to the edge. Seam together with somewhat loose, elastic stitches.

4. Woven Seam

Seams of crocheted work may be woven together using a tapestry needle and matching yarn. This seam is especially recommended when joining edges of patterned crochet.

To sew a woven seam

- Edges to be joined should be matched up side-by-side.
- Secure thread at one end. Bring threaded needle up through the first stitch of the left side. Thread needle through centre of the first stitch on the right side.
- Alternate weaving technique from edge to edge in the same manner, matching rows and pattern. Stitches should be slightly loose and elastic.
- To use this technique, the pieces to be joined must have the same number of rows and pattern. The end result is an almost invisible seam.

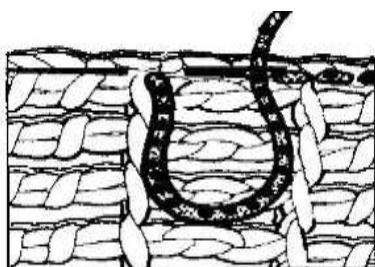


Fig. 2.1.38 backstitch seam

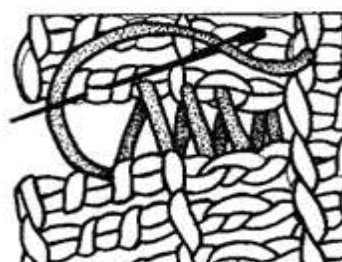


Fig. 2.1.39 Woven seam

2.1.6.7 Decrease double crochet

- Yarn over the hook (yo).
- Insert the hook into the next stitch.
- Yarn over.
- Draw the yarn through the stitch.
- Yarn over.
- Draw the yarn through the first 2 loops on the hook.
- on the hook.
- Yarn over the hook (yo).
- Insert the hook into the next stitch.
- Yarn over
- Draw the yarn through the stitch.
- Yarn over.
- Draw the yarn through the first 2 loops on the hook.
- (You should have 3 loops remaining on the hook.)
- Yarn over.
- Draw the yarn through all 3 loops on the hook.
- Made 1 complete double crochet stitch decrease.
- The Fig. 2.1.42 shows above as it appears in crochet stitch diagram.

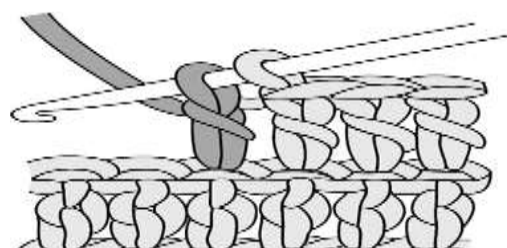


Fig. 2.1.40 Two loops remain on the hook



Fig. 2.1.41 Insert the hook into the next stitch

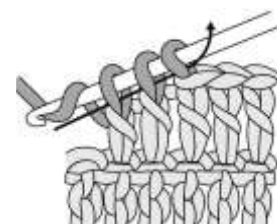


Fig. 2.1.42 Symbol for a double
crochet decrease

2.1.6.8 Shaping in Crochet by Increases

- Shaping in crochet is very easy and need to get perfect straight fabric.
- Shaping in crochet is accomplished with Increases and decreases.
- These techniques permit to crochet any shape or form.

Increases

- To make increase in stitches; crochet two or multiple stitches into the same stitch.
- To increase fabric on left or right side, make desired number of increases within a row, and repeat it for several rows.
- Keep the progression in order by placing a marker (contrasting yarn or a plastic coil ring) where increasing begins.
- For shaping to the right, increase before the marker; to the left, after the marker.
- On the next row, reverse this order to maintain consistency of the direction.

1. To make a single increase

To increase a single stitch at a time, use the following method.

For an example,

- Make single increase with single crochet.
- Increase all other types of stitches in the same way.
- Crochet 2 stitches in 1 stitch.

2. To make a double increase

To increase two stitches at a time, use the following method.

For an example

- To make double increase with single crochet.
- Increase all other types of stitches in the same way.
- Crochet 3 stitches in 1 stitch.

3. To make a decorative double increase

- This is a very special type of increase to make chains in previous row to increase stitches in next row or subsequent rows.
- This increase is usually used as a boarder to give lacy finish.
- In the first row make chain 2 at the location where that wants to increase.
- On next row or subsequent rows, crochet (1 stitch, chain 2, 1 stitch) in 2-chain space of previous row.

Tips

To increase several stitches at one edge

- This is an increase usually used when a sleeve is made in one piece with the garment.
- Extend a chain from the side edge, and then crochet back along the chain on the next row with desired type of stitch.

Exercise**I. Answer the following questions.**

1. What is a Crochet?

2. How double crochet is formed?

3. Define triple stitch crochet.

4. List the name of different crochet seam.

II. State whether the following statements are True or False.

1. Single crochet stitch is the shortest and most compact of the basic stitches.

True

False

2. Double crochet stitch is taller and creates work that is more open and lacier than a SC stitch.

True

False

3. Half double crochet stitch is taller than a single crochet stitch but not as tall as a double crochet stitch.

True

False

4. Treble stitch is a continuation of the double crochet stitch.

True

False

5. Crocheting in the front loop only forms a ridge on the back of the work.

True

False

6. Crocheting in the back loop only forms a ridge on the front of the work.

True

False

7. A single crochet seam produces a raised decorative seam.

True

False

8. The backstitch seam is sometimes used when joining crocheted sections.

True

False

9. Woven seam is especially recommended when joining edges of patterned crochet.

True

False

10. Decorative double increase is a increase to make chains in previous row to increase stitches in next row or subsequent rows.

True

False

Unit 2.2: Tracing Pattern from the Master Pattern











Unit Objectives






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






1. identify the requisites for preparing the design template.
2. prepare the design template as per instructions.

2.2.1 Symbols and their Crochet Stitches

Table 1

Symbol	Stitch
	dc3tog
	3-dc cluster
	3-hdc cluster/puff st/bobble
	5-dc popcorn
	5-dc shell
	ch-3 picot
	front post dc (FPdc)
	back post dc (BPdc)
	worked in back loop only**
	worked in front loop only*

Symbol	Stitch
	chain (ch)
	slip stitch (sl st)
	or single crochet (sc)*
	half double crochet (hdc)
	double crochet (dc)

	treble crochet (tr)
	double treble crochet (dtr)
	sc2tog
	sc3tog
	dc2tog

2.2.1.1 Reading Crochet Symbol Charts

Check the pattern key for the symbol chart

Note that most symbols correspond to US crochet terms but some patterns.

Accompanying written instructions

Work from the symbol chart but refer back to the written instructions to confirm that attempted working correctly.

Notice the color of the chart

- Crochet pattern worked in rows will have symbols in one color on right side rows (often black) and another color (blue or red, usually) for wrong side rows.
- Pattern are numbered only on the right side rows (those that are worked right to left in a right-handed patter) or that the right side rows are numbered on the right and the wrong side rows on the left.

Mark off the rows

- To keep the track of where you are in a pattern, it can be helpful to mark off the rows so that you don't lose track of the place in the work. This can be done with marks on the diagram or by using a row counter, and by using stitch markers in the physical work to track the stitches and rows.

2.2.1.2 Color Chart in Crochet

Crochet patterns use a color chart rather than written instructions to show designs with color changes. A color chart is a grid, with each square representing 1 stitch.

Since most of the stitches are in black and white, symbols in each square will indicate the difference in colors. So, always refer to the chart key to find out which symbol stands for which color.

When reading a chart, read the odd-numbered rows from right to left and the even-numbered rows from left to right, unless otherwise specified. Read the chart in this way simply, because initially the foundation chains run from left to right and then the first row starts from right to left. Hence the second row runs from left to right.

Fig. 2.2.2 shows stitches made from the color chart.

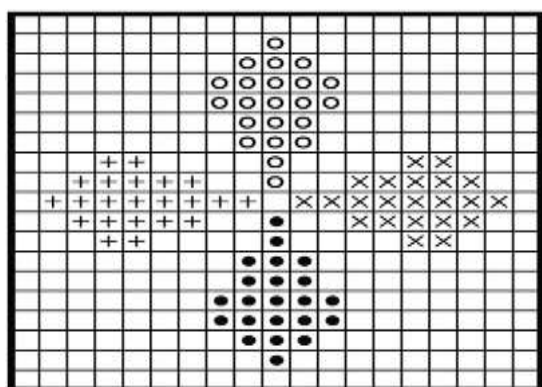
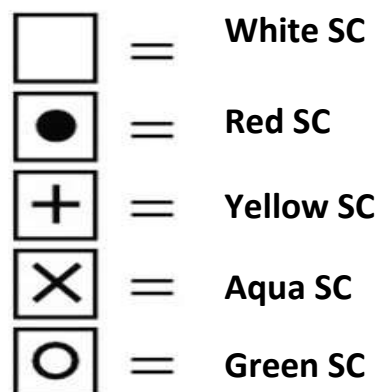


Fig. 2.2.1 Color Chart in Crochet



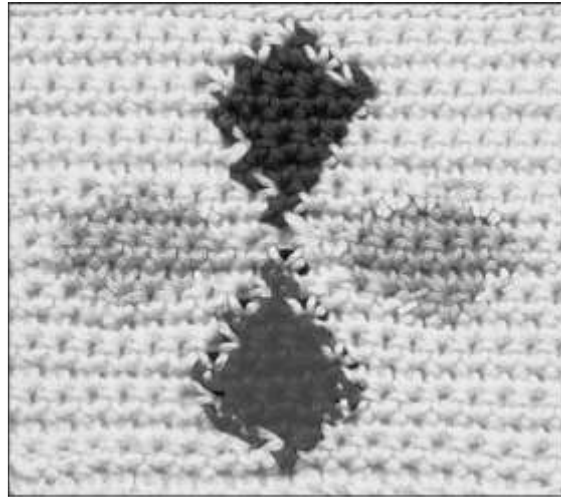


Fig. 2.2.2 Color pattern in Crochet product

Abbreviations

These abbreviations are used in the edgings below.

- Ch –chain
- DC – Double crochet
- Rep - Repeat
- Rev - reverse
- SC –Single crochet
- Sl st – slip stitch

2.2.1.3 Pattern Reading in Crocheting



Fig. 2.2.3 Pattern laces

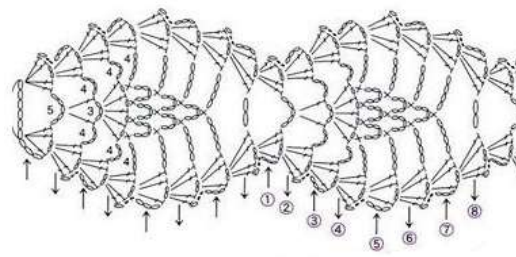

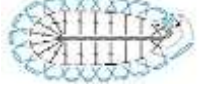
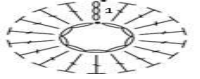




Fig. 2.2.4 Repetition of stitches in Pattern laces

2.2.1.4 Crochet Necklace Pattern

Table 2

Sl. No.	Design	Name
1.		Small leaf
2.		Large leaf
3.		Circle

Sl. No.	Design	Name
4.		Medallion
5.		Flower

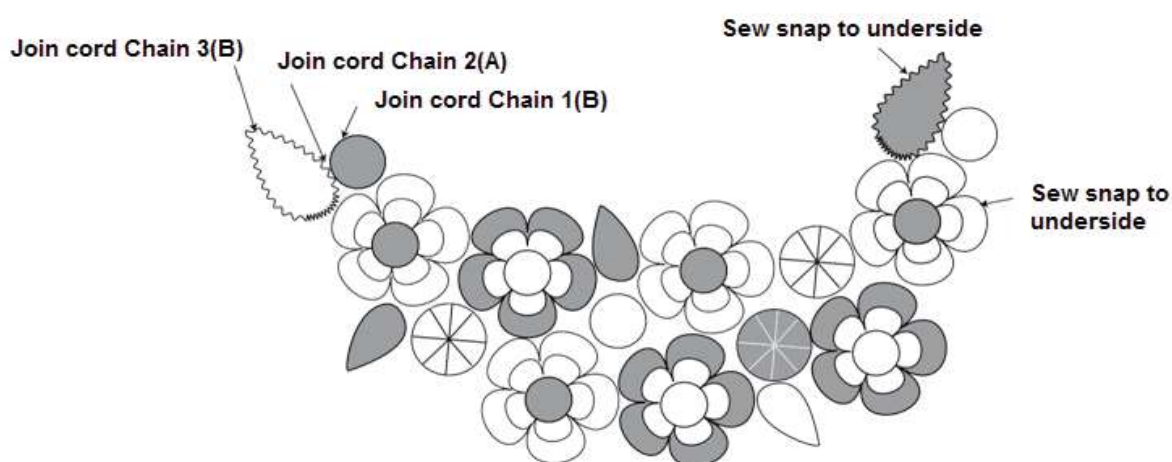
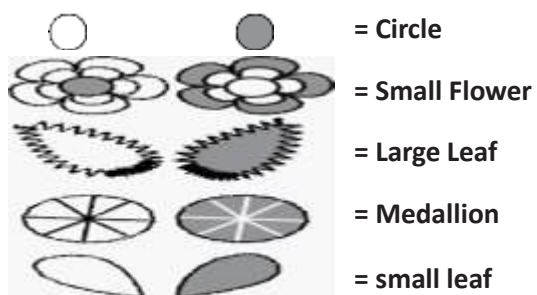


Fig. 2.2.5 Color pattern in Crochet product



2.2.1.5 Material used

Steel Crochet Hook

1.4 mm (US 8). 2 Snap closures, 6 mm; sewing needle and matching thread; Tapestry needle.

Abbreviations

ch = chain

dc = double crochet

hdc= half double crochet

* = repeat whatever follows the * as indicated

[] = work directions in brackets the number of times specified.

mm = millimetres

rnd = round

sc= single crochet

st (s) = stitch (es)

2.2.1.6 Description of work

Flower

A refers to white colour thread and B refers to Black colour thread

Make 7 flower: 3 flowers using **A (white colour thread)** for centers and **B (Black colour thread)** for petals; 4 flowers using B for centers and A for petals: With center color, ch 6; join with a slip st in first ch to form a ring.

Center-Rnd 1

Ch 3, 2 dc in ring, ch 7, [3 dc in ring, ch 7] 4 times; join with a slip st in top of ch-3. Fasten off.

Petal-Rnd 2

With right side facing, join petal color in center dc of any 3-dc group; ch 3, 15 dc in next ch-7 space, * skip next dc, dc in next dc, skip next dc, 15 dc in next ch-7 space; repeat from * around; join. Fasten off.

Circle

(Make 3 circles: 2 with A and 1 with B) Ch 9; join with a slip st in first ch to form a ring.

Rnd 1: Ch 3, 17 dc in ring; join with a slip st in top of ch-3. Fasten off.

Medallion

(Make 3 medallion: 2 with A and 1 with B) Ch 9; join with a slip st in first ch to form a ring.

Rnd 1: Ch 3, 17 dc in ring; join with a slip st in top of ch-3.

Rnd 2: Ch 3, dc in same st as joining, ch 1, skip next dc,

* 2 dc in next dc, ch 1, skip next dc; repeat from * around; join in top of ch-3. Fasten off.

Small Leaf

(Make 3 small leaves: 1 with A and 2 with B) Ch 9. Rnd 1: Sc in 3rd ch from hook, hdc in next 2 ch, dc in next 3 ch, 8 dc in last ch; pivot to work along opposite side of foundation ch, dc in next 3 ch, hdc in next 2 ch, sc in next ch; join with a slip st in first sc. Fasten off.

Large Leaf

(Make 2: 1 with A and 1 with B) Ch 9.

Rnd 1: Repeat Rnd 1 of Small Leaf. Do not fasten off.

Rnd 2: Ch 1, sc in first sc, ch 1, * sc in next st, ch 1; repeat from * around; join with a slip st in first sc. Fasten off.

Finishing:

Arrange pieces according to diagram. Using tapestry needle, sew shapes together with thread tails. Weave in any remaining ends.

2.2.1.7 Neck Cord-Cord Chain 1

Join thread to the left side of the piece at joining location as shown in the diagram; ch 110. Leave a long yarn tail at the end of the chain and do not make a knot.

- Work two more cords for Cord Chain 1.
- Loosely braid the three cord chains and measure against the neck.
- If the length is comfortable, knot the three chains together at this length, leaving only 3–4 chains on each strand after knot.
- If the length is too long, pull out last few chains of each strand to achieve desired length and knot together, leaving only 3–4 chains on each strand after knot.
- With tapestry needle, sew ends into knot.
- Sew snap socket onto knot and corresponding stud onto flower petal.
- Sew second snap socket onto braided strand approximately 1" from first snap.
- Sew corresponding stud to tip of leaf as shown in the diagram. Weave in all ends.

2.2.2 Identify the Crochet Symbols












At the end of this exercise, you will be able to:





1. read and identify the name of crochet symbols
2. write the symbol name in table 3.







Practical

Crochet Necklace pattern Crochet Symbols

Table 3

Symbol	Name of Crochet Symbol
	
	
 or 	
	
	
	
	
	
	
	

Symbol	Name of Crochet Symbol
	
	
	
	

Exercise



I. Answer the following questions.

1. List the name of materials used for crochet

2. Draw a symbol for slip stitch and single crochet.

II. State whether the following statements are True or False.

- | | | | | |
|------------------------|------|--------------------------|-------|--------------------------|
| 1. Ch – reverse | True | <input type="checkbox"/> | False | <input type="checkbox"/> |
| 2. DC – Double crochet | True | <input type="checkbox"/> | False | <input type="checkbox"/> |
| 3. Rep - Repeat | True | <input type="checkbox"/> | False | <input type="checkbox"/> |
| 4. Rev - chain | True | <input type="checkbox"/> | False | <input type="checkbox"/> |
| 5. SC –Single crochet | True | <input type="checkbox"/> | False | <input type="checkbox"/> |
| 6. Sl st – slip stitch | True | <input type="checkbox"/> | False | <input type="checkbox"/> |

Notes



2.2.3 Crocheting Edging

2.2.3.1 Types of Edging

1. Basic Edging
2. Crab Stitch
3. Shell Edging
4. Picot Edging
5. Block Edging
6. Blanket Edging

1. Basic Edging

Crocheting a basic edging of one or two rows or rounds on the outer edges of a design can smooth out the rough spots and add a finished professional look to the crocheted items. You can even add crocheted edgings to other materials. Here are a few options:

- Crochet a round of single crochet stitches around the bottom edge, neck edge, and cuffs of a sweater, especially one that you worked in a heavier-weight yarn.
- When making a patchwork Afghan or sweater, edge each panel or motif with a row of stitches (typically the slip stitch or single crochet is used to create a smoother edge for joining).
- Crochet decorative strips of some of the fancier stitches (such as shells, clusters, and chain loops) with cotton thread and sew these edgings on pillowcases, sheets, handkerchiefs, and towels — or down the seam of the jeans.

2. Crab Stitch



Fig. 2.2.6 Crab stitch

Working stitches: any number of stitches

Finishing:

Work an odd number of rows (at least one) of single crochet. At the end, do not turn — Ch 1, skip the stitch directly to the RIGHT and reverse single crochet (rev SC*) into each SC, ending with a sl st in the turning chain of the previous row. Fasten off.

Worked in the round

sl st into first SC, Ch 1, then continue as for working flat, ending with a sl st into first rev SC.

***Rev SC (worked from left to right)**

Insert hook in next stitch to the right, yarn over, pull loop through, yarn over, pull through both loops on hook.

3. Shell Edging

Working stitches: multiple of 4 stitches + 1.

The sample above was worked after one row of contrasting SC.

Finishing

Ch 1, SC in first st, *skip 1 st, 5 DC in next st, skip 1 st, 1 SC in next st; Rep from * to end, SC in last st (or turning ch, if you work in the turning chains). Fasten off.



Fig. 2.2.7 Shell Edging

4. Picot Edging

Use picots for a decorative edge that's not going to outshine the pattern. This really simple edge uses only single crochet and chains.

Working stitches

- Any number of stitches, depending on how you want to space the bumps (picots).
- The edging above uses 3 chain picots with two stitches between each.

Finishing

Treat this like a row of SC. After the first stitch, Ch 3, 4, or 5 and sl st into first ch (picot made!). Work two, three, or four stitches, then make another picot. Continue working like that, ending with a picot over the second to last SC.



Fig. 2.2.8 Picot edging

5. Block Edging

DC is used in patterns, but they make a edge too. If it is put a pattern, next row can be made by crocheting into the corners of each little block and chaining to get to the next.

Working stitches: Multiple of 4 stitches + 3

Finishing

Ch 3, skip first 3 stitches, *1 DC in next st, Ch 3, 3 DC around the post of the DC, skip next 3 stitches; Rep from * to last 3 stitches, Ch 3, sl st in last stitch or turning chain of previous row.

Worked in the round

Ch 6, DC in 4th ch from hook, DC in next ch, 2 DC in first ch, skip next 3 stitches, * 1 DC in next st, Ch 3, 4 DC around the post of the DC, skip next 3 stitches; Rep from * around, slst into third chain of beg-ch.

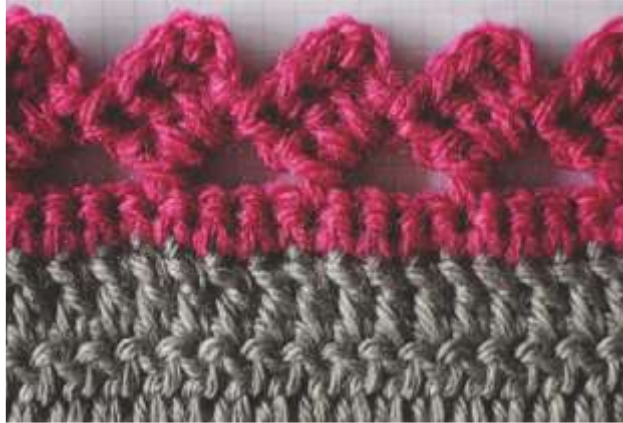


Fig. 2.2.9 Block Edging

6. Blanket Edging: This one gets its name because it resembles the blanket stitch in embroidery. It's a simple stitch that looks best in a contrasting color.

Working stitches: any number of stitches

Finishing: This stitch utilizes the spike SC. Space them to suit the number of stitches you have in the row or round.

For example: (multiple of 4 stitches + 3)

Ch 1, SC in first 3 stitches, *1 SC in next stitch by inserting the hook about 1/4-inch below the edge, 1 SC in each of the next 3 stitches; Rep from * to end. Fasten off. You can make the spikes longer by inserting the hook lower in the main piece.

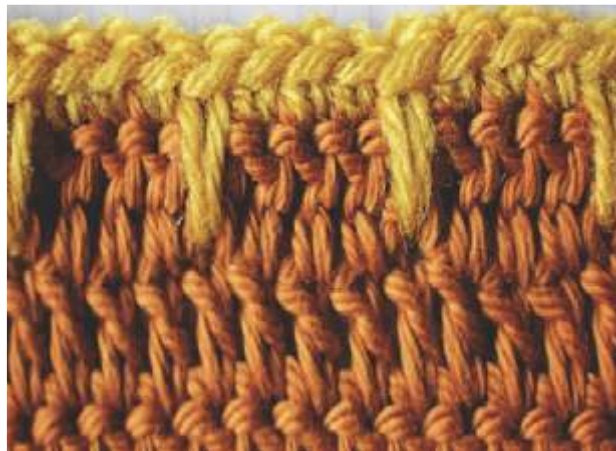


Fig. 2.2.10 Blanket Edging

2.2.4 Pompoms Pattern

At the end of this exercise, you will be able to:

1. identify and list the materials used for pattern
2. prepare pompoms pattern shawl.

Materials

- 4 oz., 4-ply worsted weight yarn (two colors)
- lightweight cardboard (from a cereal box)
- paper scissors
- shears

Work Instruction

Step-1

Cut two 2" circles out of lightweight cardboard. Cut a 1/2" opening and then cut a 3/4" circle out of the centre of each. (This will look like a 'C'.)

Step-2

Place two 12" lengths of yarn between cardboard.

Step-3

Wrap yarn around cardboard starting at one end of opening and wrapping evenly to the other side and continue back and forth until the pompom reaches the desired thickness (density).

Step-4

Tie 12" length of yarn once to hold wrapped yarn together. With shears, cut yarn between cardboard all the way around.

Step-5

Tie 12" length of yarn tightly with a square knot to hold cut yarn firmly.

Step-6

Trim pompom evenly and to desired size. The pompom is ready to be added to any product.



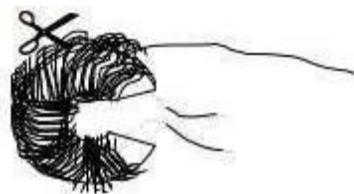
Step-1



Step-3,4



Step-2



Step-5



Step-6

Fig. 2.2.11 Various Steps of Pompoms Pattern

Exercise



I. Answer the following questions.

1. What is basic edging in crocheting?

2. How many types of crochet edges is used in crocheting?

3. How grab stitch work in the round design.

II. State whether the following statements are True or False.

1. Picot edges are used for decorative edge that's not going to outshine the pattern.

True

False

2. Work with any number of stitches, depending on how you want to space the bumps in a picot edging.

True

False

3. Blanket edging resembles the blanket stitch in embroidery, with simple stitch that looks best in a contrasting colour.

True

False

4. Pompoms are made out of lightweight cardboard.

True

False

Notes 

3. Carry out the Crocheting Process for Apparel, Accessories and Furnishing Products



- Unit 3.1 Crocheting Process for Crochet Lace Apparel
- Unit 3.2 Crochet Lace Making Process for Accessories
- Unit 3.3 Crocheting Process for Crochet Lace Furnishings
- Unit 3.4 Crocheting Process with Special Features and Storage of Crocheted Products



Key Learning Outcomes



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

1. Identify the appropriate crocheting process for different applications.
2. Identify the tools and equipment required for making the crocheted products.
3. Describe the working of the crocheting used for making apparels.
4. Describe the working of the crocheting used for making accessories.
5. Describe the working of the crocheting used for making furnishings.
6. Demonstrate the process of adding beads/sequins as a part of the crocheted product.
7. Identify the method of creating edgings to the crocheted product.
8. Identify the method of handling the crocheted products without affecting its shape and stability.

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



<https://www.youtube.com/watch?v=7pnJJUvvFr8>

Carry out the Crocheting Process for Apparel, Accessories and Furnishing Products

Unit 3.1 Crocheting Process for Crochet Lace Apparel

Unit Objectives

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

1. identify the raw materials as per the requirements of the crocheting process
2. carry out crocheting process for making apparels with specified crochet stitch.

3.1.1 Identification of Raw Materials and Tools for Crocheting of Apparels

3.1.1.1 Broomstick Crocheting

- It is a type of crochet that repeats by working two rows of repeats.
- It is similar to cast on and off in knitting process.
- First, the initial foundation chain and row are to be made.
- Then the yarn is wrapped around the large pin to create loops.
- The loops are then slipped from the needle and worked together in groups to create an open stitch in a shell shape.

3.1.1.2 Tools Required for Crocheting

The standard crochet hook and a large pointed pin such as knitting needle is required.

- Size of the pin decides the size of the holes created in the fabric.
- The hook size is determined as per the weight of the yarn being used.

Table 1

Thread Count (No.)	Hook Size
5	1.75/2mm
10	1.25/1.5mm
15	1.25/1.5 mm
20	1.00/1.25 mm
30	1.00/1.25 mm
40	1.00 mm
50	1.00 mm
60	0.75 mm
80	0.60 mm
100	0.60 mm

- The length and width of the desired pattern for determining the size and detail of the fabric to be created is measured.
- Finer yarn is preferable than the thicker yarn.
 - Finer yarn with large pin creates lacier effect.
 - Thicker yarn with smaller pin creates less lacier effect.

3.1.1.3 Confirmation of Raw Materials

- Analyse the specification sheet for the name of the product, components of the product, storage requirements and handling directions
- Identify the key requirements of the raw materials and tools such as;

yarn specification

- yarn thickness
- yarn surface
- yarn quantity

hook specification

- hook size

process specification

- tension
- gauge

Confirm whether the raw materials must meet regulatory requirements and your specifications

- Ensure the tools used contribute to the functionality and quality of your process and product.
- Select the raw materials and handle the in-process and finished product in an appropriate manner to ensure the safety, legal, and product specifications.
- Analyse the use the existing material capable of carrying out the process.
- Place the tools required for crocheting in accessible area to avoid additional labour and decrease the time for changeovers.

3.1.1.4 Non-Confirmation of Raw Materials

- Identify whether the raw material has the same or similar characteristics as mentioned in specification.
- Identify the yarn thickness and appropriate hook size.
- Identify the yarn surface characteristics – presence of hairs, uneven thickness.
- Identify the presence of any defects in the hook.
- Analyse the colour of the yarn.
- Identify the presence of any stain in the yarn and the hook.
- If it doesn't meet the specific standard, ask the authority and replace it with the appropriate materials.

Exercise



I. Answer the following questions.

1. Identify the tools required for broomstick crochet making process.

2. What type of yarn gives lacier effect?

II. State whether the following statements are True or False.

1. The hook size is determined based on the weight of the yarn.

True

False

- Size of the hook determines the size of the hole in the crochet.

True

False

Notes

3.1.2 Crochet Lace Making Process for Apparels

3.1.2.1 Broomstick Crochet Making Process

- When you start the crocheting, hold the pin and hook in your hands.
- If you find it difficult, then try to hold the pin between your knees.

Step 1

- Make a chain stitch to the required width using multiple stitches.
- Work a row of single crochet based on the length of the pin as it determines the width of the crochet.

Step 2

- Use the hook to stretch open the final stitch of the row.
- Slip the stitch onto the pin.

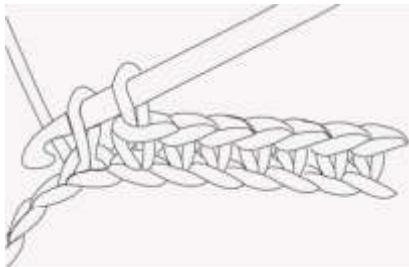


Fig. 3.1.1 Broomstick crochet (Step 1)

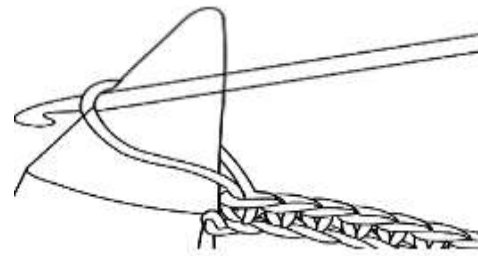


Fig. 3.1.2 Step 2

Step 3

- With right side facing, insert the hook through the next stitch along to the right.
- Wrap the yarn around the hook.
- Draw through the yarn and create another loop.
- Slip this loop onto the pin.

Step 4

- Draw a loop through each stitch and place it on the needle to the end of the row.

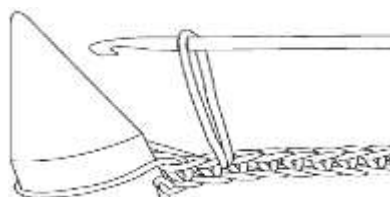


Fig. 3.1.3 Step 3

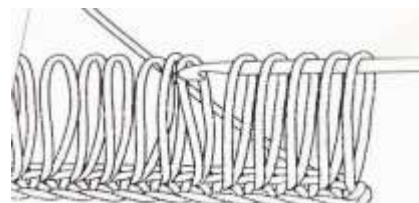


Fig. 3.1.4 Step 4

Return Row**Step 5**

- Carefully slip all the loops from the pin.
- Hold the work in left hand.
- Insert the hook through the first 5 stitches without twisting the loops.

Step 6

- Wrap the yarn around the hook and draw through the loops.
- Wrap the yarn around the hook again.
- Draw through to create a chain.

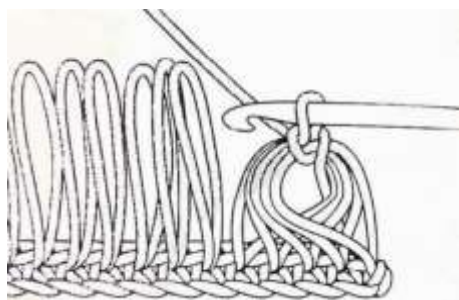


Fig. 3.1.5 Step 5

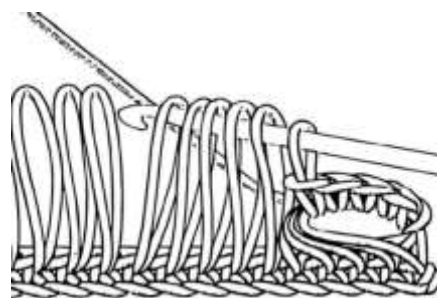


Fig. 3.1.6 Step 6

Step 7

- Work 5 single crochet stitches around the 5 loops.
- Insert the hook through the next 5 stitches and repeat the step 6 to the end of the row.
- Leave the final stitch on the hook.

Step 8

- To work the next row, follow with steps from step 2, placing the hook through the top chain of each stitch made on the previous row.
- The appearance of the broomstick crochet lace product appears similar on both the sides, making it reversible.
- If we want to differentiate, front side will have smooth stitches while back side will have extended stitches.

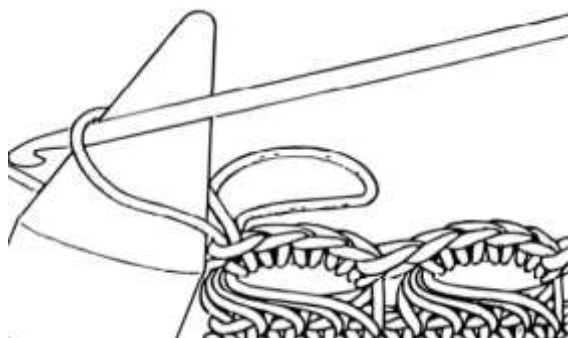


Fig. 3.1.7 Step 7

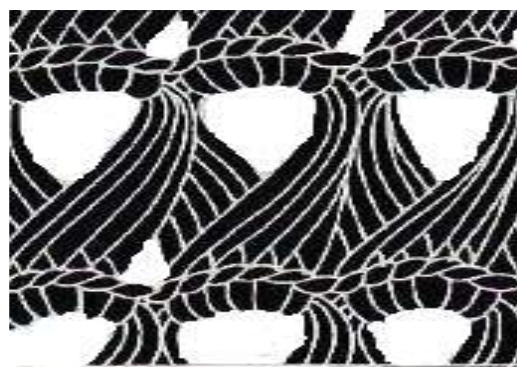


Fig. 3.1.8 Step 8

3.1.2.2 Applications

- Broomstick crochet lace cardigan
- Broomstick crochet lace cowl Offset
- Broomstick Lace Shawlett

3.1.3 Making a Broomstick Crochet Lace Product



At the end of this exercise, you will be able to:

1. prepare a broomstick crochet lace product.

Practical



Requirements

Tools/Instruments		Equipment/Machines	
Crochet hook	- 1 No.	Thimbles	- 1 No.
Measuring tape	- 1 No.	First aid Kit	- 1 No.
Broomstick pin	- 1 No.	Fire extinguisher	- 1 No.
Materials/Components			
Thread	- 1 No.		

Making a broomstick crochet lace

- Measure the length to be made from the specification sheet.
- Start the basic chain stitch to the required length.
- Make the broomstick crocheting over the basic stitch as per the instructions.
- Press it.

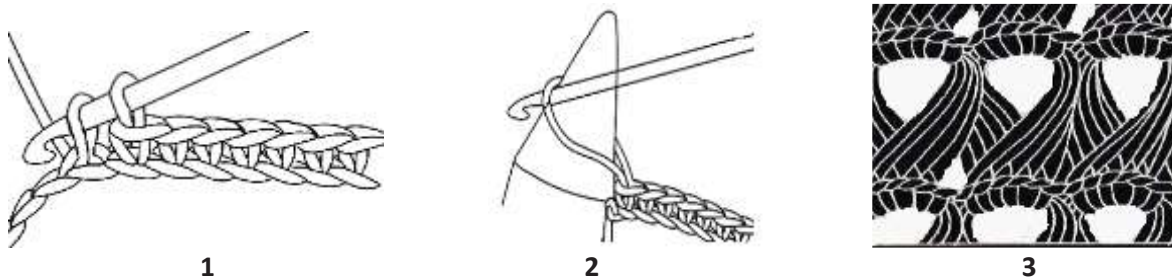


Fig. 3.1.9 Broomstick crochet lace various steps (Step 1, Step 2 and Step 3)

Exercise



I. Answer the following questions.

1. Identify the length of the chain stitch to be made for the broomstick crochet lace products.

2. List the applications of broomstick crochet lace products.

II. State whether the following statements are True or False.

1. The front side of broomstick crochet will have smooth side of stitches.

True

False

2. The broomstick crochet is an irreversible product.

True

False

Unit 3.2 Crochet Lace Making Process for Accessories

Unit Objectives

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

1. identify various type of raw materials as per the requirement of the crocheting process
2. carry out crocheting process for making accessories with specified crochet stitch.

3.2.1 Identification of Raw Materials and Tools for Crocheting of Accessories

1. Irish Crocheting

- It is a type of thread crochet that uses very fine thread to make stylish motifs.
- It is often worked over a piece of cord instead of creating a crochet chain, embossed effect.

2. Hairpin Crocheting

- It is a type of thread crochet which is made by wrapping the yarn around the two prongs of the hairpin tool and it uses the crocheted hook to catch the yarns through the centre of the two pins.
- When the piece is removed, the loops are created on either side of the central stitches.

3. Tools Required for Crocheting

- The standard crochet hook and a large pointed pin such as knitting needle is required.
 1. Size of the pin decides the size of the holes created in the fabric.
 2. The hook size is determined as per the weight of the yarn being used.

Table 1

Thread Count (No.)	Hook Size
5	1.75/2mm
10	1.25/1.5mm
15	1.25/1.5 mm
20	1.00/1.25 mm
30	1.00/1.25 mm
40	1.00 mm
50	1.00 mm
60	0.75 mm
80	0.60 mm
100	0.60 mm

- The length and width of the desired pattern for determining the size and detail of the fabric to be created is measured.
- Finer yarn is preferable than the thicker yarn.
 - Finer yarn with large pin creates lacier effect.
 - Thicker yarn with smaller pin creates less lacier effect.

Tips

For Irish crocheting,

- To select yarn for foundation cord, choose slippery yarns such as nylon, as working over such yarn will be easier than working over a coarse yarn.
- By choosing slippery yarn will give neat appearance.

For hairpin crocheting,

- Hairpin tool is also called as hairpin fork, which comes in many shapes and sizes.
- We can make our own hairpin tool by bending a piece of strong wire into a U shape.
- hairpin tool is available in many ranges from high quality wooden looms to plastic models.
- It is adjustable and one can change the width of the gap between the pins.

Exercise

I. Answer the following questions.

1. Identify the crochet process used to make stylish motifs.

2. How can we make our own hairpin tool?

II. State whether the following statements are True or False.

1. The finer yarn with large pin creates lacier effect.

True

False

2. Size of the pin decides the size of the holes created in the fabric.

True

False

Notes

3.2.2 Crochet Lace Making Process

3.2.2.1 Irish Crochet Making Process

- Irish crocheting for making necklace need to be worked in a line.

Step 1

- Using the chosen yarn make a slip knot.
- Place it on the hook.
- Hold the cord over the hook.

Step 2

- Wrap the yarn around the hook and draw through the cord.
- Complete a single crochet.

Step 3

- Take the hook under the cord from front to back.
- Wrap the yarn around the hook.
- Bring the hook back under the cord to the front.
- Complete the stitch.
- Continue the work over the top of the cord, making sure that the stitches encase the cord and do not overlap each other.

Step 4

- At the end of the row gently pull one on one end of the cord to tighten.

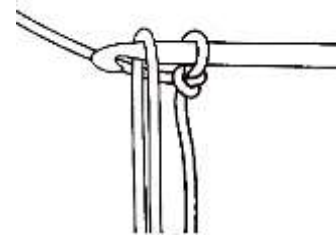
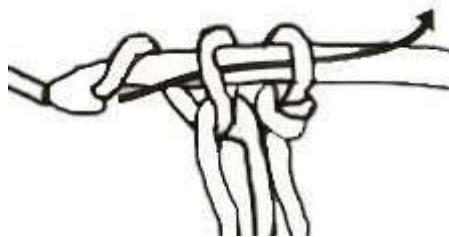


Fig. 3.2.1 Irish crochet (Step 1)

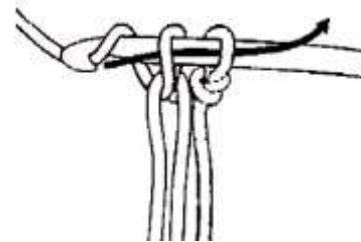


Fig. 3.2.2 Step 2

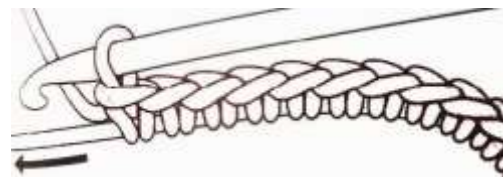


Fig. 3.2.3 Step 3 and Step 4

3.2.2.2 Applications

- Applique
- Scarf
- Purse
- Socks

3.2.2.3 Hairpin Crochet Making Process

- Hairpin crochet is produced in strips that can be used as a lace edging or can be joined together to form a fabric.

Step 1

- Make a slip knot in the yarn and place over the left prong of the hairpin tool, positioning the knot at the centre point of the gap between the two prongs.

Step 2

- Take the yarn around the back of the hairpin tool.
- Insert the crochet hook up through the loop created by the slip knot and behind the yarn at the back of the tool.

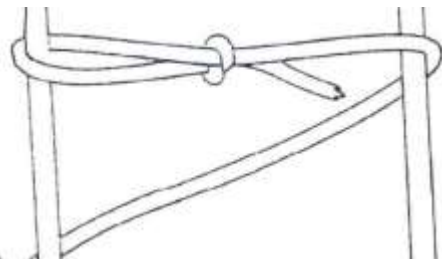


Fig. 3.2.4 Hairpin crochet making process (step 1)

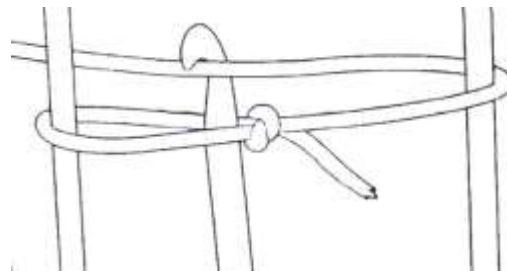


Fig. 3.2.5 Step 2

Step 3

- Draw the yarn through the loop created by the slip knot.

Step 4

- Wrap the yarn around the hook and draw through the loop on the back.

Step 5

- Move the hook to a vertical position, with the hook end pointing down.
- Turn the hairpin tool a half turn.
- The yarn will automatically wrap itself around the hairpin tool.

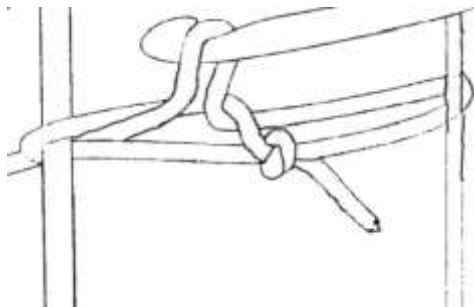


Fig. 3.2.6 Step 3

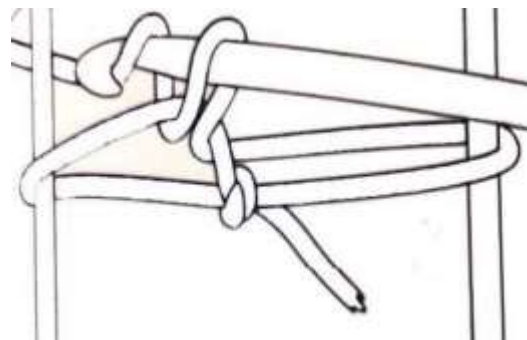


Fig. 3.2.7 Step 4

Step 6

- Take the hook back to the usual position.
- Insert the crochet hook up through the loop to the left-hand side of the centre and behind the yarn at the back of the tool.

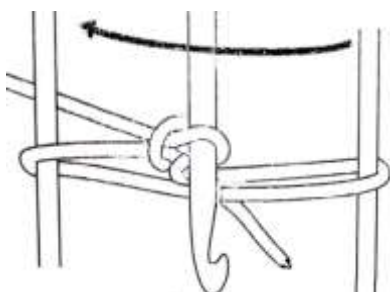


Fig. 3.2.8 Step 5

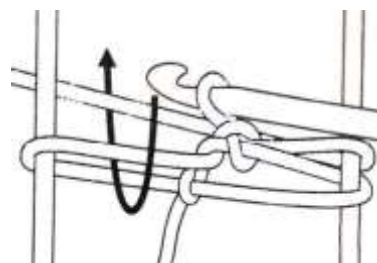


Fig. 3.2.9 Step 6

Step 7

- Draw the yarn through the loop so that there are 2 loops on the hook.

Step 8

- Wrap the yarn around the hook and draw through the loops on the hook.

Step 9

- Continue in this way turning the tool a half turn with each stitch made.

Step 10

- When the hairpin tool is full, reposition the crocheted work to continue.
- Place the second top clip onto the prongs.
- then remove the original clip end from the prongs and slowly pull the work downward till the few loops remain on the tool.
- A stitch marker passes through the last stitch stops the crochet work from unravelling.

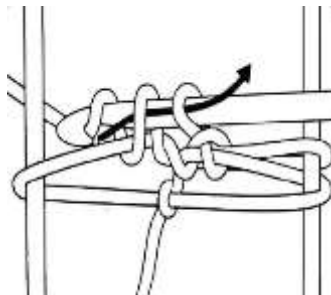


Fig. 3.2.11 Step 8

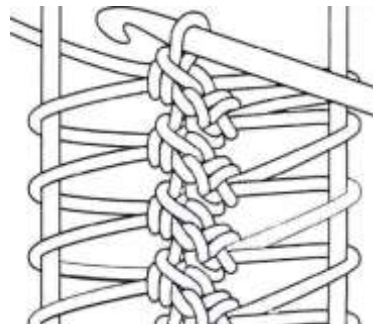


Fig. 3.2.12 Step 9

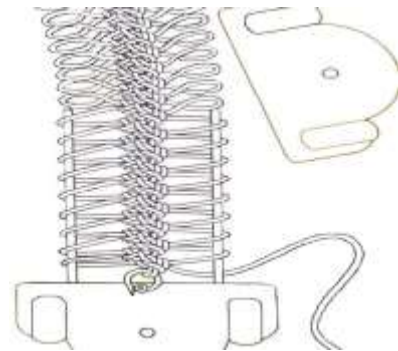


Fig. 3.2.13 Step 10

Step 12

- To give stability to the structure, work on edging along one or both sides of the loops.
- Make sure that each thread crossover in the loop of the stitch remains.
- Hold the central spine part of the crochet, insert the hook into the first loop and work a single crochet.
- Continue by working a stitch into every loop till the end of the crocheted work.
- Work on the second side of the loops to match if it is required.

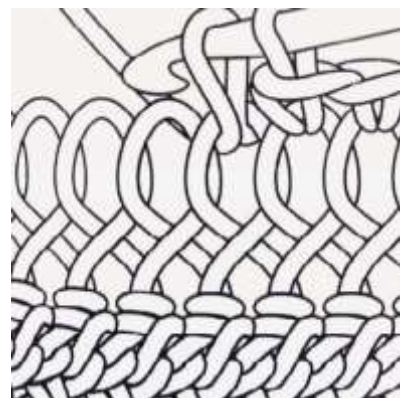
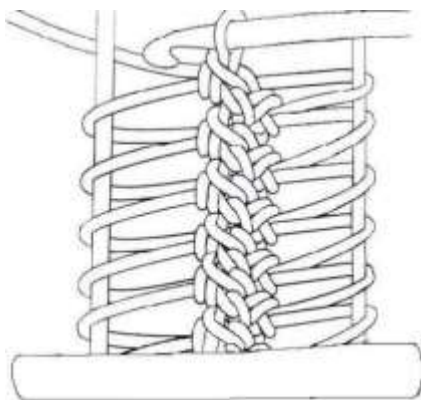


Fig. 3.2.12 Steps involved in the development of hairpin crochet lace (1-12)

3.2.2.4 Applications

- Shawls
- hats
- scarves

3.2.3 Making an Irish Crochet Lace Product



At the end of this exercise, you will be able to:

1. describe the Irish crochet lace product making process.

Practical



Requirements

Requirements			
Tools/Instruments		Materials/Components	
Crochet hook	- 1 No.	Thread	- 1 No.
Measuring tape	- 1 No.		
Equipment/Machines			
First aid Kit	- 1 No.		
Fire extinguisher	- 1 No.		

Making an Irish crochet lace

1. Measure the length to be made from the specification sheet.
2. start with the slip knot.
3. Make the single crochet stitch.
4. Finish it as per the instructions with the final loop stitch.

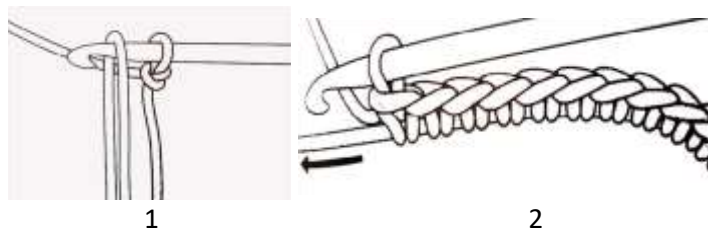


Fig. 3.2.13 Step 1 and step 2

3.2.4 Making a Hairpin Crochet Lace Product



At the end of this exercise, you will be able to:

1. carry out hairpin crochet lace product.

Practical

Requirements

Tools/Instruments		Materials/Components	
Crochet hook	- 1 No.	Thread	- 1 No.
Measuring tape	- 1 No.		
Hairpin tool	- 1 No.		
Equipment/Machines			
First aid kit	- 1 No.		
Fire extinguisher	- 1 No.		

Making a hairpin crochet lace

1. Measure the length to be made from the specification sheet.
2. Start with the slip knot.
3. Make the loop through the yarn.
4. Complete the stitches row by row as per the instructions to a product.

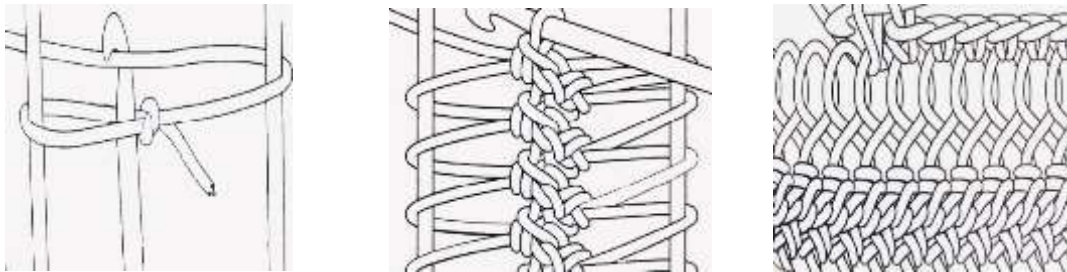


Fig. 3.2.14 Step 1, Step 2 and Step 3

Exercise

I. Answer the following questions.

1. Describe the applications of Irish crochet lace making process.

2. List the applications of hairpin crochet lace making process.

II. State whether the following statements are True or False.

1. A stitch marker passes through the last stitch, stops the crochet work from unravelling.
True False
2. Hairpin crochet is produced in strips that can be used as a lace edging or can be joined together to form a fabric.
True False

Unit 3.3 Crocheting Process for Crochet Lace Furnishings

Unit Objectives

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

1. identify the various types of raw materials as per the requirement of the crocheting process
2. carry out crocheting process for making home furnishings with specified crochet stitch.

3.3.1 Identification of Raw Materials and Tools for Crocheting of Furnishings

3.3.1.1 Filet Crocheting

- It is a type of crochet that uses stitches with a long post and areas of chain in a grid type formation.
- It requires a graph to follow upon.
- It is shown in the form of a grid that differs to standard crochet charts.
- To make a piece of filet crochet you work a sequence of either blocks of stitches or create a space by working a chain.

3.3.1.2 Tools Required for Crocheting

List of tools

1. Crochet hooks
2. Scissors
3. Darning needle
4. Measuring tap
5. Hook organizer
6. Row counter

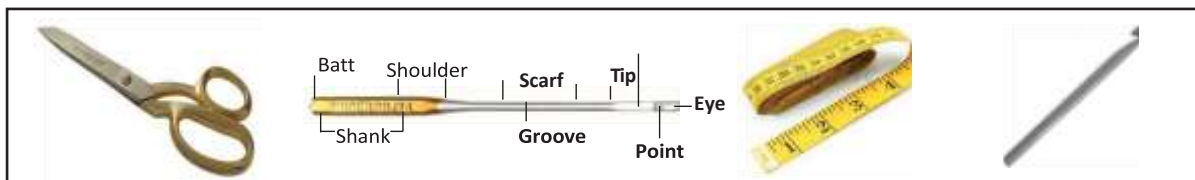


Table 1

Thread Count (No.)	Hook Size
5	1.75/2mm
10	1.25/1.5mm
15	1.25/1.5 mm
20	1.00/1.25 mm
30	1.00/1.25 mm
40	1.00 mm
50	1.00 mm
60	0.75 mm
80	0.60 mm
100	0.60 mm

- The standard crochet hook and a large pointed pin such as knitting needle is required.
 1. Size of the pin decides the size of the holes created in the fabric.
 2. The hook size is determined as per the weight of the yarn being used.
- The length and width of the desired pattern for determining the size and detail of the fabric to be created.
- Finer yarn is preferable than the thicker yarn.
 1. Finer yarn with large pin creates a lacier effect.
 2. Thicker yarn with smaller pin creates less lacier effect.

Exercise 

I. Answer the following questions.

1. Identify the type of stitch with a long post and areas of chain in a grid type formation.

3. List the advantage of using finer yarn than thicker yarn.

II. State whether the following statements are True or False.

1. A stitch marker passes through the last stitch stop the crochet work from unravelling.

True

False

2. Hairpin crochet is produced in strips that can be used as a lace edging or can be joined together to form a fabric.

True

False

Notes 

3.3.2 Crochet Lace Making Process for Furnishings

3.3.2.1 Fillet Crochet Making Process

When you start the crocheting, first you should read the chart using symbols to represent the stitches instead of a grid formation.

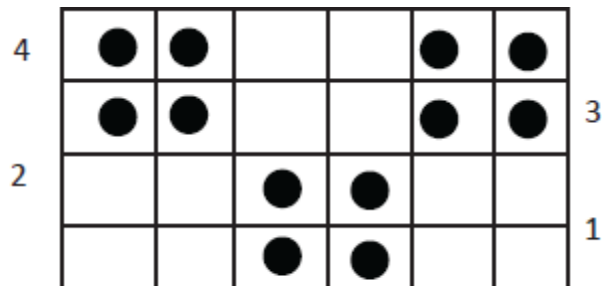


Fig. 3.3.1 Fillet crochet lace making symbols

Step 1:

- While reading the grid, row 1 is read from right to left and row 2 is worked from left to right.
- Similarly row 3 is read from right to left and row 4 from left to right and goes on.
- The shaded area represents the block of stitches and the empty square represents the space made by the chain.

Step 2:

- When we start the first crochet with space then make a foundation chain.
- A chain is long enough to be equivalent to the height of the stitch used, plus the length of the chain needed to travel along the top of the piece.
- It thus forms the framework for the next row.

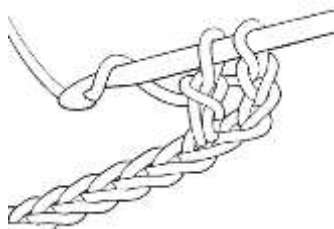


Fig. 3.3.2 Step 1

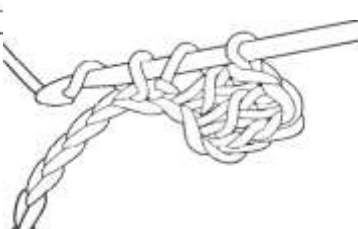


Fig. 3.3.3 Step 2

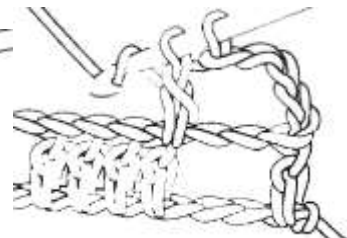


Fig. 3.3.4 Step 3

Step 3

- Add correct number of stitches to the foundation chain to accommodate the height of the chosen stitch.
- Work the stitch into the next chain.

Step 4

- Work 2 further stitches into the subsequent stitches.

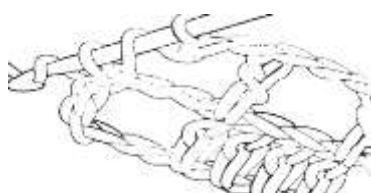


Fig. 3.3.5 Step

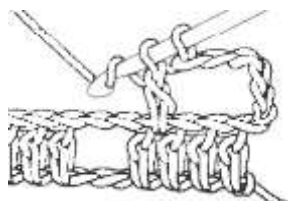


Fig. 3.3.6 Step 5

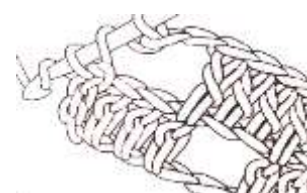


Fig. 3.3.7 Step 6

Step 5

- Working a space over a space.

Step 5 (a)

1. Work the required number of chains.
2. Work a stitch into the top of the corresponding stitch on the row below.
3. Continue the process till the end of the work.

Step 5 (b)

1. At the end of the row, work on the final stitch into the top of the turning chain on the previous row.

Step 6

- Working a space over a block.

Step 6 (a)

1. At the beginning of the row, the work requires number of chain stitches.
2. Miss the block of stitches on the previous made row of stitches.
3. Work a stitch into the top of the corresponding stitch on the row below.
4. Continue to work till the end of the row.

Step 6 (b)

1. At the end of the row, work till the last stitches of the block made on previous row.
2. Work the final stitch into the top of the turning chain on the previous row.

3.3.2.2 Applications

1. Table runners
2. Lace effect window dressings

3.3.2.3 Irish Crochet Making Process**Step 1**

- Use the yarn of your choice.
- Make a slip knot and place it on the hook.
- Hold the cord over the hook.

Step 2

- Wrap the yarn around the hook and draw through the cord.
- Complete a single crochet stitch to hold the yarn to the cord.



Fig. 3.3.8 Step 1

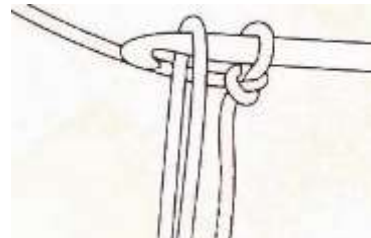


Fig. 3.3.9 Step 2

Step 3

- Wrap the cord to make a loop to the required size of the motif.

Step 4

- Work to the required number of stitches over the cord.
- Pull one end of the cord to close the circle slowly.
- Finish the row, work a slip stitch into the first made stitch.

Step 5

- Work the next row, hold the cord in line with the top of the crochet.
- Enclose it within the piece, by working next stitches around it.

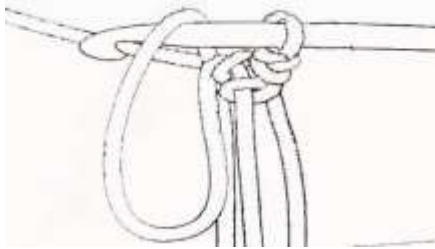


Fig. 3.3.10 Step 3

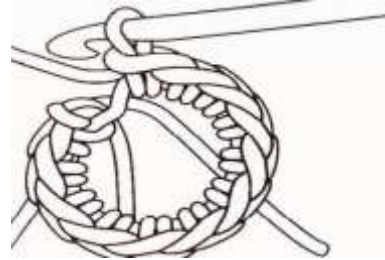


Fig. 3.3.11 Step 4

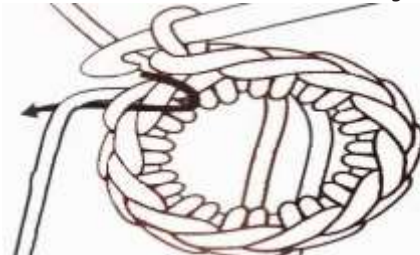


Fig. 3.3.12 Steps involved in the development of Irish crochet lace (1-5)

3.3.2.4 Applications

- doily
- table runners

3.3.3 Making an Irish Crochet Lace Product

At the end of this exercise, you will be able to:

1. Perform an Irish crochet lace product making.

Practical

Requirements

Tools/Instruments

- Crochet hook - 1 No.
- Measuring tape - 1 No.

Equipment/Machines

- First aid kit - 1 No.
- Fire extinguisher - 1 No.

Materials/Components

- Thread - 1 No.
- Design map - 1 No.

Making an Irish crochet lace

1. Measure the length to be made from the specification sheet
2. Start with the slip knot
3. Make the single crochet stitch
4. Finish it as per the instructions with the final loop stitch

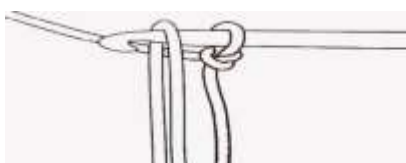


Fig. 3.3.13 Step 1 and step 2

3.3.4 Making a Filet Crochet Lace Product



At the end of this exercise, you will be able to:

1. perform a filet crochet lace product making.

Practical

Requirements

Tools/Instruments		Materials/Components	
Crochet hook	- 1 No.	Thread	- 1 No.
Measuring tape	- 1 No.	Design map (Pattern)	- 1 No.
Equipment/Machines			
First aid Kit	- 1 No.		
Fire extinguisher	- 1 No.		

Making a filet crochet lace

1. Measure the length to be made from the specification sheet
2. Analyse the given pattern
3. Make the foundation chain
4. Continue the loop formation over space and block
5. Complete the filet crocheting as per the instructions

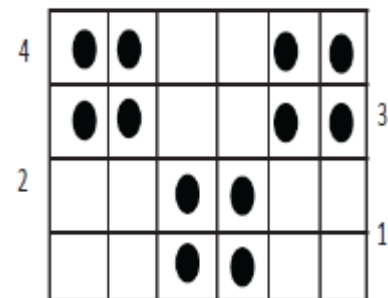


Fig. 3.3.14 Grid formation

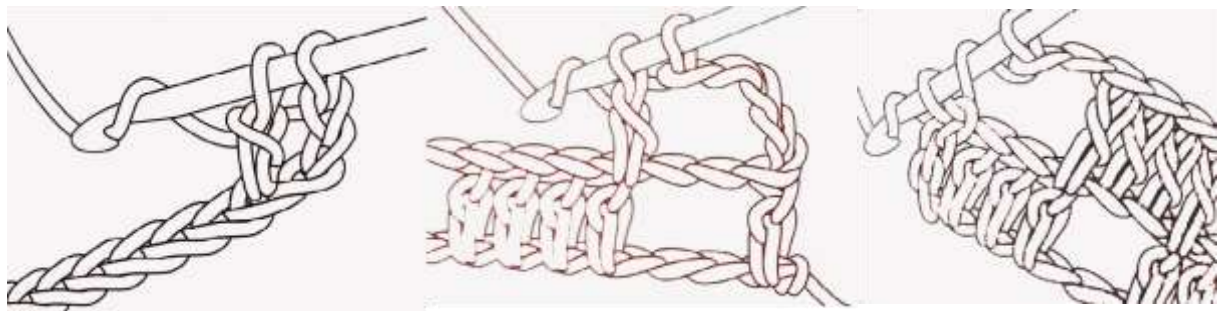


Fig. 3.3.15 Various steps of filet crochet (Step 1-4)

Exercise



I. Answer the following questions.

1. Identify the applications of Irish crochet lace making process.

2. List the applications of filet crochet lace making process.

II. State whether the following statements are True or False.

1. A chain is long enough to be equivalent to the height of the stitch used, minus the length of the chain needed to travel along the top of the piece.

True

False

2. In Irish crochet, make a slip knot and place it on the hook.

True

False

Notes



Unit 3.4 Crocheting Process with Special Features and Storage of Crochet Products

Unit Objectives

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

1. describe crocheting process with beads and sequins and crochet lace with edgings on products
2. storage of crochet lace products.

3.4.1 Crocheting Process with Special Features

3.4.1.1 Beads

- It comes in all shapes and sizes.
- It comes in varying materials of clay, plastic or glass.

3.4.1.1.1 Threading Beads

- Select the strong sewing thread and a fine needle.
- Place the beads in a felt or fine flannel on a saucer or bowl.
- Avoid using palm or slippery flat surface for holding the beads.
- Selected needle size should be large enough to thread the beads.

Step 1

- Thread the needle.
- Make a small knot joining the ends and form a loop.
- Move the knot in such a way that it is not in line with the sewing needle horizontally.

Step 2

- Place the end of the yarn through the loop created by the sewing thread.
- Pass the beads through the eye of the needle and push it down through the sewing thread then to the yarn.

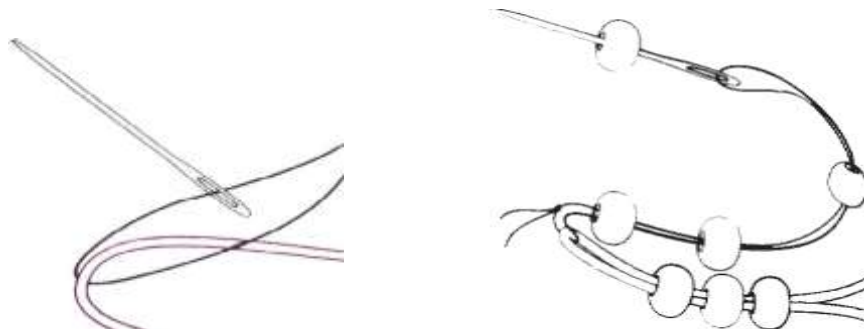


Fig. 3.4.1 Needle threading (Step 1 and Step 2)

Step 3

- Work on the place where the bead placement is required.
- Slide the bead along the yarn, so that its bead sits against the right side of the fabric.
- Place the hook through the next stitch.

Step 4

- Wrap the yarn around the hook and bring the hook through the stitch.
- Wrap the yarn around the hook and complete the stitch by holding the bead in place.

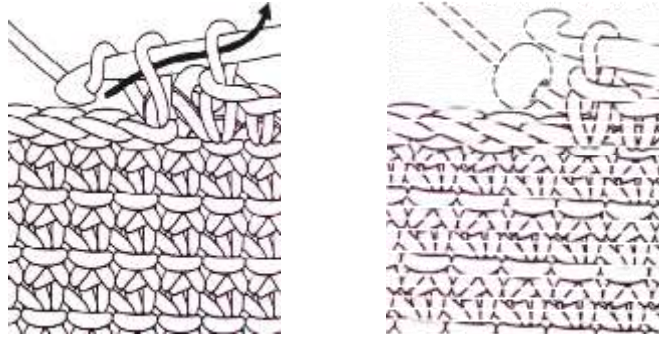


Fig. 3.4.2 Various steps involved in the attachment of bead to the crochet lace (Step 1 to 4)

3.4.1.2 Sequins

- It comes in all shapes and sizes.
- It comes in different colours.
- It comes in varying materials of plastic or glass.

3.4.1.3 Threading Beads

- Similar to the threading of beads.
- When working on sequins, group the beads together by placing more than one beads in a place.

Step 1

- Work on the place where the sequin placement is required.
- Put the hook through the next stitch.
- Wrap the yarn around the hook and bring it through the formed stitch.
- Slide the sequin along the thread and make sure it sits against the fabric right side.
- Complete the stitch by holding the sequins in place.

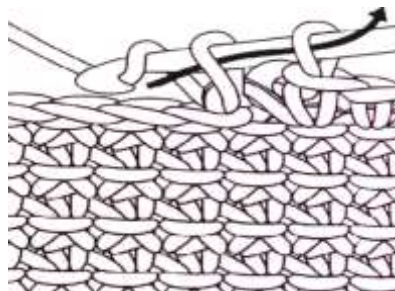


Fig. 3.4.3 Steps involved in the attachment of sequins to the crochet lace

3.4.1.4 Placing Sequins or beads within a chain

- It is a method of placing the bead or sequin within a chain.
- When working in this method, the bead or sequin are to be placed by keeping the wrong side facing you.
- When keeping the beads or sequins in the chain push them through the wrong side of the work.
- Ensure the chain is tight enough.

Step 1

- Work a chain till the bead/sequin placement part.
- Slide the bead/sequin through the chain and make it to sit next to the hook.

Step 2

- Complete the chain by wrapping the yarn around the hook beyond the bead/sequin.
- Draw them through the stitch.

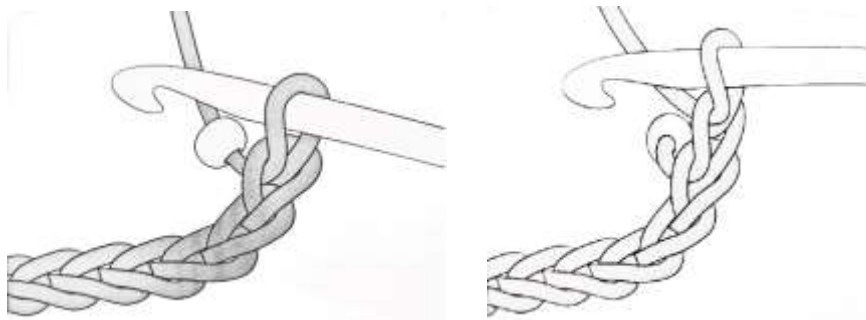


Fig. 3.4.4 Steps involved in the attachment of bead/sequins within a crochet (Step 1 and 2)

3.4.1.5 Placing Sequins or beads using a crochet hook

- It is a method of placing the bead or sequin without pre-threading them onto the thread.
- For this method, we need metal crochet hook to thread them into the stitch.

Step 1

- Work a chain till the bead/sequin placement part.
- Work the next stitch to the point where two loops remain on the hook.
- Slip the yarn loop from the crochet hook slowly.
- Make sure you should not pull on the yarn end to unravel.

Step 2

- Push the bead/sequin onto the small crochet hook.
- catch the thread loop with this hook.
- push the bead/sequin from the crochet hook to the yarn loop.



Fig. 3.4.5 Steps involved in the placement of bead/sequins using a crochet hooks (Step 1 to 2)

Step 3

- Slip the thread loop back onto the crochet hook.
- Complete the stitch.

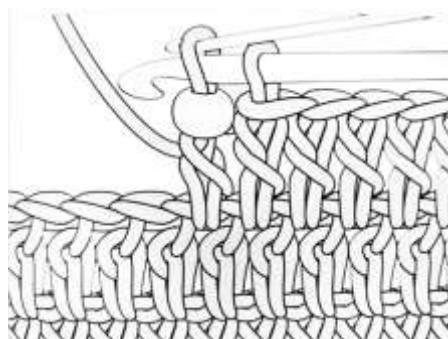


Fig. 3.4.6 Steps involved in the placement of bead/sequins using a crochet hooks (Step 3)

3.4.1.6 Creating Edgings

- It is method to stop crochet fabric from curling.
- It can also be used to add aesthetically pleasing effects to the crochet fabric.
- It can be worked in matching colour or contrasting thread.

Step 1

- While working on the bottom or top of a crochet fabric, insert the hook into the centre of each stitch from front to back.

Step 2

- While working on the side edge of the crochet fabric, insert the hook through the working on one complete stitch from edge from front to back.

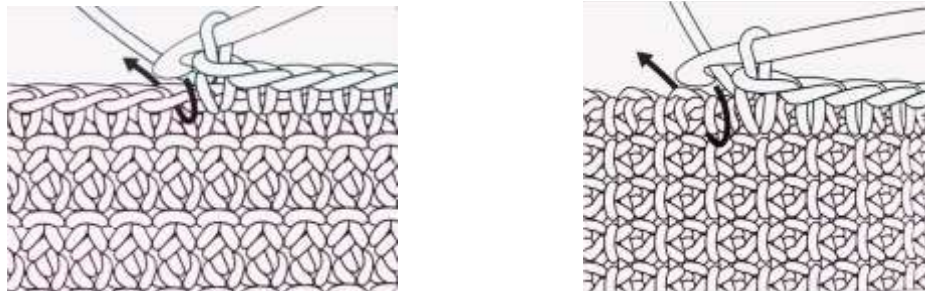


Fig. 3.4.7 Steps involved in the development of crochet edging (Step 1 to 2)

3.4.1.7 Care of Crocheted Products

- The crocheted products should not be spoiled by poor care.
- The crocheted products last for many more years with proper handling and care if it is made out of good quality thread.

1. Handling of crocheted fabrics

- Never wring, twist or rub the crocheted fabric against any surface.
- Never use brush to remove the spots or stains present in the crocheted product.
- Never keep the crocheted product under bright sunlight that may causes fading or yellowing of the colours.
- Special care to be given for the products made out of yarns with lanolin or natural oils as it is more susceptible to attack by moths.

2. Folding

- It should be stored in a flat position.
- It should be placed as loosely as possible.

3. storage

- When storing crocheted products for a longer period of time, wrap the product in a tissue or paper and cover it with the polybags.
- Place some mothballs inside the bag to protect the crocheted product from attack of moths.
- While storing it for a longer period of time, completely dry it in air in order to avoid the odour formation.

4. Blocking

- it is the method of preparing the crochet product before using it for sewing process.
- When it is taken from store area, open it and slightly stretch the product to bring it back to its size and shape.
- For better result, pin it down to avoid the curling.
- Leave the fabric in air to dry it with occasional turning to remove the odor and moisture present in the product.

5. Ironing

- While ironing, make sure that the hot baseplate does not touch the crochet fabric.
- Hold the iron at least 1" away from the crochet piece.
- Use steam setting and allow the crocheted product to absorb the hot steam.
- Leave to dry.

3.4.2 Making a Crochet Lace Product with Beads/Sequins



At the end of this exercise, you will be able to:

1. prepare a beaded or sequined crochet lace products.

Practical



Requirements

Requirements			
Tools/Instruments		Materials/Components	
Crochet hook	- 1 No.	Thread	- 1 No.
Measuring tape	- 1 No.	Design map (Pattern)	- 1 No.
Metal hook	- 1 No.		
Equipment/Machines			
First aid Kit	- 1 No.		
Fire extinguisher	- 1 No.		

Making a beaded or sequined crochet lace product

1. Measure the length to be made from the specification sheet.
2. Start with the foundation crocheting.
3. Insert the bead/sequin either by means of within the chain or using metal hook.
4. Finish it as per the instructions by locking the bead/sequin.

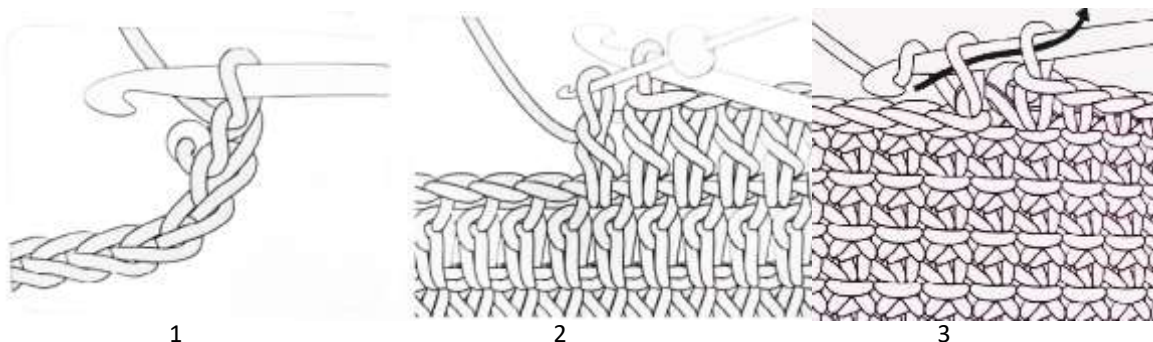


Fig. 3.4.8 Steps 1,2 and 3

3.4.3 Making an Edging on Crocheted Product



At the end of this exercise, you will be able to:

1. perform a beaded or sequined crochet lace products.

Practical

Requirements

Tools/Instruments		Materials/Components	
Crochet hook	- 1 No.	Thread	- 1 No.
Measuring tape	- 1 No.	Design map (Pattern)	- 1 No.
Equipment/Machines			
First aid Kit	- 1 No.		
Fire extinguisher	- 1 No.		

Making an edging

1. Measure the length to be made from the specification sheet.
2. Make the foundation chain.
3. Continue the loop formation till the end.
4. Complete the crocheted work by edging process as per the instructions.

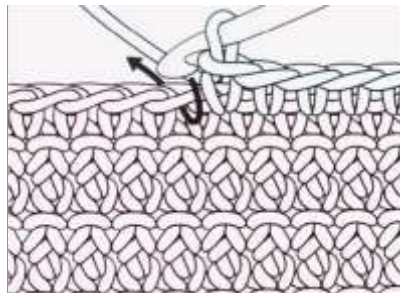


Fig. 3.4.9 Steps 1,2,3 and 4

Exercise

I. Answer the following questions.

1. Identify the different shapes of beads.

2. State the method to avoid curling of the edges of the crocheted fabrics.

II. State whether the following statements are True or False.

1. While adding the bead/sequin within the chain, the bead or sequin are to be placed by keeping the wrong side facing you.

True

False

2. While doing crocheting, place the beads in the palm for easy process.

True

False

4. Contribute to Achieve Quality in Crochet Lace Making for Apparel, Accessories and Furnishing Products



- Unit 4.1 Quality checking of raw material
- Unit 4.2 Work safety measures to maintain work flow process
- Unit 4.3 Quality checking of crocheted lace



Key Learning Outcomes



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

1. Identify quality requirements of raw materials.
2. Analyse raw materials for quality requirement adherence.
3. Identify different defects in crochet lace products.
4. Analyse crochet products for any defect.
5. Perform replacement or rectification of found defective materials or defects respectively.

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



<https://www.youtube.com/watch?v=SOWKe3oi5bc>

Contribute to Achieve Quality in Crochet Lace Making for Apparel, Accessories and Furnishing Products

Unit 4.1 Quality Checking of Raw Material

Unit Objectives

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

1. check the quality of the materials used for lace making, and check whether it meets the specification.
2. report and replace the defected materials.

4.1.1 Quality Parameters of Tools Used for Lace Making

4.1.1.1 Quality parameters of Crochet Hooks:

Crochet Hooks selected for making crocheted lace should maintain the correct shape and size without any damage.

- **Head and Throat** - The head is the hook that catches the thread/yarn; Hook should be tapered with a rounded hook and the throat should be in shaped section to guide the thread/yarn up the hook. Head should not have sharp bend.
- **Shaft** - The diameter of the shaft or shank should be selected in correct size and in cylindrical shape as it determines the size of finished stitch.
- **Grip/thumb rest and Handle** -The grip/thumb rest and handle should be smooth and long enough to hold the crochet hooks which helps in proper crocheting.



Fig. 4.1.1 Parts of Crochet Hook

4.1.1.2 Quality parameters of crochet thread/yarn:

The thread/yarn selected for the crochet lace making should be checked with the following quality Parameters:

- **Hairiness** -Hairiness is the fibres protruding from the structure of the thread/yarn. The thread/yarn selected for lace making should have smooth outer surface without any hairiness which helps in producing quality product.

4.1.1.3 Quality parameters of crochet thread/yarn:

The thread/yarn selected for the crochet lace making should be checked with the following quality Parameters:

- **Hairiness** -Hairiness is the fibres protruding from the structure of the thread/yarn. The thread/yarn selected for lace making should have smooth outer surface without any hairiness which helps in producing quality product.
- **Thick and thin place** -The thread/yarn should have uniform thickness and should not have thick and thin places as shown in fig.4.1.3

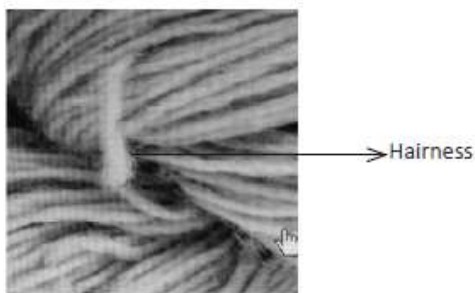


Fig. 4.1.2 Yarn hairiness



Fig. 4.1.3 Yarn thick and thin place

- **Twist** – Thread/yarn twist is the spiral turns given to a thread/yarn in order to hold the constituent fibres or thread/yarn together. The crochet thread/yarn selected for lace making should be tightly twisted and should not be bulkier as shown in figure 3.1.4

A poorly spun thread/yarn that has a loose twist or one that has become unravelled may cause the lace fabric to bias. Working with the thread/yarn from the other end of the ball could help alleviate this problem because it can tighten the twist on the thread/yarn.

All these defects in thread/yarn should be checked before making the lace product. If the crochet thread/ yarn selected has any of these defects, it should be reported to the responsible person for immediate change of the thread/yarn. The following figure shows the crochet thread/yarn without any defects.



Fig. 4.1.4 Yarn with improper twist



Fig. 4.1.5 Crochet thread/yarn without defect

- **Shade variation:**

The thread/yarn selected for crochet lace making should have even depth of shade throughout the bundle. Some of the thread/yarn may have light colour for particular length and dark colour for particular length. This type of thread/yarn should be reported and replaced before making lace product.

- **Strength:**

The strength of the thread/yarn has to be checked before using it for lace making. It should be pulled by hand and checked. If the thread/yarn breaks immediately then the strength of the thread/yarn is very less and it should be replaced. The thread/yarn which has more plies and tightly twisted and without thick and thin place should be selected to get good strength in product.

4.1.2 Quality Parameters of Accessories

4.1.2.1 Quality parameters

Bead and sequins are the accessories used in crocheted lace for decorative effects. The following quality parameters have to be checked in bead and sequins before using it in lace:

Quality of Bead:

1. Bead should have even colour in all the sides and there should not be any faded effect. If light shade is preferred in a single colour, all the beads selected should be in light shade. If dark or medium shade is preferred in a single colour, all the beads should have same depth of shade.
 2. All the beads should have the uniform shape and size.
 3. Avoid using beads with sharp points.
 4. The bead should not have cuts on its surface as shown in figure 3.1.6.
 6. The holes in the centre of the bead should be round and large enough for the crochet hooks to enter in it.
 7. The bead should not have any damage on its outer surface as shown in figure below. 3.1.7.
- All these defects in the bead should be checked before using it in lace. If the bead selected has any of these defects, it should be reported to the responsible person and replaced.



Fig. 4.1.6 Cut marks in bead



Fig. 4.1.7 Defective bead

Quality of sequins:

Sequins selected for decorating the lace should have the following parameters without any deviation.

1. All the sequins used should have exact round shape.
2. The size of all the sequins should be same either in Large or medium or smaller in size.
3. There should not be any crack identified in sequins.
4. The surface of the sequins should be smooth.
5. Breakage in the sequins should be avoided.
6. Holes in all the sequins should be round in shape and large enough, so that crochet hooks and thread/yarn can be inserted in it.



Fig.4.1.8 Defective sequins

4.1.3 Fault Analysis of Crocheted Lace Thread/Yarn



At the end of this exercise, you will be able to:

1. Identify the faults in crocheted lace thread/yarn
2. Identify the properties of hooks required for making lace
3. Analyse the faults in bead and sequins.

Practical

Requirements

Requirements			
Tools/Instruments		Materials/Components	
Crochet hook	- 1 No.	Thread	- 1 No.
Measuring tape	- 1 No.		
Broomstick pin	- 1 No.		
Equipment/Machines			
Thimbles	- 1 No.		
First aid Kit	- 1 No.		
Fire extinguisher	- 1 No.		

1. Identify the faults in lace thread/yarn

- Check whether the thread/yarn is having more hairiness on its outer surface.
- Find out whether the thread/yarn is having thick and thin places.
- Hold the thread/yarn and check whether it is highly twisted.
- Pull the thread/yarn in both hands and find out the strength of lace thread/yarn.
- Check whether any colour shade variation is available in the thread/yarn.

2. Properties of crochet hook required for lace making

- Check whether the crochet hook is in round shape.
- Take the crochet hook and find out whether the hook handle and shaft part are in cylindrical shape without any damage.
- Thumb rest of crochet hook should be in flat shape.

3. Fault identification in Bead and sequins

- Check the colour of the bead and find out any change in shade variation.
- Identify any cracks or cut lines found in the bead.
- The hole of the bead should be checked and it should be in proper round shape and larger in size so that the crochet hook can easily pass through the hole.
- Check whether the shape of the bead is in round shape.
- Identify the crack or breakage in sequins.
- Check the hole in the centre of the sequins which should be large enough to allow the crochet hook to pass through.

Unit 4.2 Work Safety Measures to Maintain Work Flow Process

Unit Objectives

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

1. carry out the work safety measures in production area
2. maintain work flow and quality.

4.2.1 Work Safety Measures

4.2.1.1 Safety tool

Safety tool required for crochet making is the first aid kit.

First aid kit:

A first aid kit is a collection of supplies and equipment that is used to give medical treatment. Common first aid kits should contain the following items: Gauze pads (at least 4 by 4 inches), Two large gauze pads (at least 8 by 10 inches), A box of adhesive bandages, One gauze roller bandage, Two triangular bandages, wound cleaning agent, Scissors, At least one blanket, Tweezers, Adhesive tape, Latex gloves, Two elastic wraps.



Fig. 4.2.1 First aid kit

4.2.1.2 Ideal environment for work flow process

The work flow process should not get disturbed and it will be maintained by proper environmental set up. The factors that disturb the work process are: Noise, heat/cold, radiation, vibration, ventilation and inadequate lighting.

Lighting:

- Lights should be positioned more than thirty degrees above the line of sight and behind the person to avoid the incidence of direct or reflected light on the eyes.
- When lighting is improperly placed, it causes discomfort and a great eye wear.
- It is easier to move desks/tables for better positioning underneath the lighting, than to install new lighting.
- Workplace lighting is a key factor in an employee's productivity and well-being.
- Speed, quality of work, downtime, absenteeism, and accident rates are all affected by workplace lighting conditions.



Fig. 4.2.2 Lighting

- Illumination with blue light (455 nm) will be more effective as compared to yellow light (580 nm) or white light, independent of its level of intensity.

Unit 4.3 Quality Checking of Crocheted Lace

Unit Objectives

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

1. identify the faults made in crocheted lace
2. check the crocheted lace design developed meets the specification

4.3.1 Achieving Quality in Crochet Lace Making

1. Stitch tension

- Incorrect tensions of thread/yarn while crocheting lace will affect the size and shape of crochet fabric. Stitches that are too tight can be difficult to insert the hook into, whereas stitches that are too loose might become baggy and over stretched.
- If you do not achieve the correct tension with the given hook size, change the hook size either to a larger size (If too tight) or a smaller size (if too loose). If you find you are consistently working too tight, even on a larger hook, then you may not be taking the stitch high enough up onto the shaft of the crochet hook at the end of each stitch before you start the next one. Try making an effort to move the stitch up onto the main part of the hook between working each stitch to see if this relieves the problem.

The figure below shows the lace made with tension and without tension. The lace made with tension shows a frilled effect on the design.



Fig. 4.3.1 Lace made with Incorrect tension



Fig. 4.3.2 Lace made with correct tension

2. Turning chains

Make sure that the turning chains are in correct height for the stitch. Even if you are achieving the correct tension for the stitches, you may find that your turning chain is too loose, thus creating a large loopy space that makes the piece baggy, or is too tight and is causing stitches to stretch to accommodate it.

3. Stitch count and missed out loops

Check the count of the stitch made in rows. The first row in the figure shows uneven stitch count. Single loop is formed between two loops in first row. In a particular place three loops are formed between two stitches which produce uneven and more space in that area.

The gap in the missed-out loop in first row can be filled by additional stitch formed in that gap as shown in figure.4.3.3

The figure shows the loop formation in missed out area.

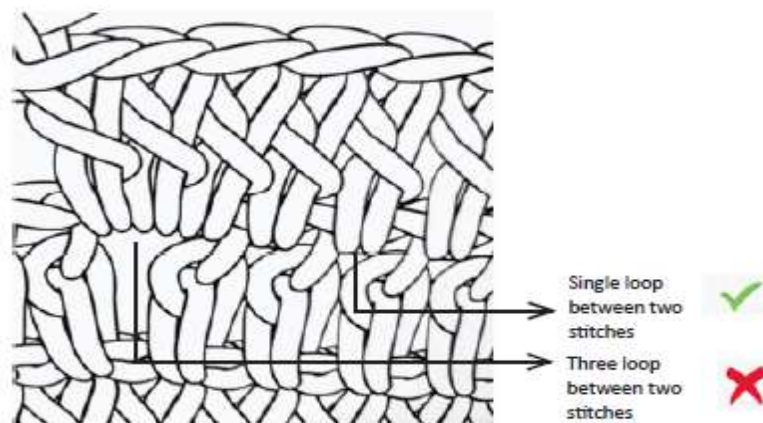


Fig. 4.3.3 Lace made with Incorrect tension

Step 1

Form a new loop by knotting at back side and take the loop through a old loop formed below the space where the stitch is missed out. Take the same colour thread/yarn for filling the gap.

Step2

Loop formation to form a single row which is missed out.



Fig. 4.3.4 Lace made with Incorrect tension

Step 3

Form stitches in the gap so as to have even spacing between the stitches.

Step 4

Finally, the column of stitch is completed and made a knot at the back side.



Fig. 4.3.5 Lace made with Incorrect tension

4.3.1.1 Neatening a slip stitch at the end of a round

The end of the lace, stitch should be finished to avoid unravelling of thread/yarn. If the finishing of loops is missed out the following steps should be followed for finishing the lace. The figure below shows the unfinished lace at the round.

Step 1

The crochet hook is taken through one end of the loop and passed into the other end of loop formed in the round.

Step 2

The loop hold by the crochet hook is taken through the other end of the loop and hence the round is finished properly. Now insert the thread/yarn to the final loop and pull it to form a knot at the edge thus preventing unravelling of the thread/yarn in the lace.

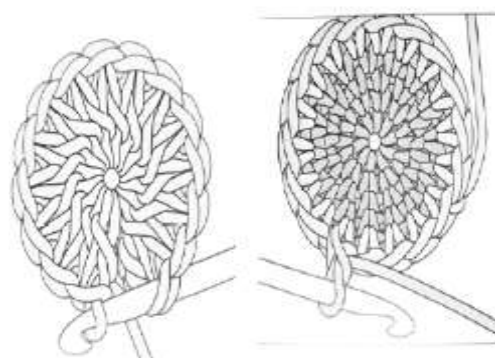


Fig. 4.3.6 Slip stitch making

Fig. 4.3.7 Slip stitch finishing

1. Loop length

All the Loops should be in same length. The figure below shows the loop length variation in a single row. This is because of the improper tension maintained during loop formation.

2. Checking of design with specification



Fig. 4.3.8 loop length variation

The design produced should match with the specification. The stitches not match with the specification given if you are working with the wrong abbreviations and symbols. Hence it is necessary to check the pattern/design often during the process so as to meet the specification.

3. Accessories arrangement

- Accessories used should be in flat position and does not get turned or inserted in the gap between loops of crocheted lace.
- Bead and sequins used in lace should be attached in equal space as shown in the figure below

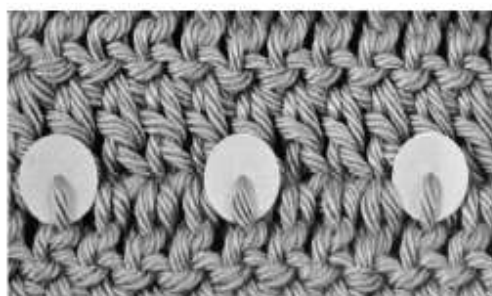


Fig. 4.3.9 Spacing between sequins



Fig. 4.3.10 Spacing between Bead

4.3.2 Fault Analysis of Crocheted Lace Thread/Yarn

At the end of this exercise, you will be able to:

1. Identify the faults in crocheted lace product during the process
2. Analyse the fault after completing the crocheted lace.

Practical

Requirements

Tools/Instruments	Materials/Components
Crochet hook - 1 No.	Thread - 1 No.
Measuring tape - 1 No.	Plain crocheted lace fabric - 1 No.
Broomstick pin - 1 No.	Crocheted lace with bead - 1 No.
Equipment/Machines	Crocheted lace with sequins - 1.No.
Thimbles - 1 No.	
First aid Kit - 1 No.	
Fire extinguisher - 1 No.	

I. Identify the faults in crocheted lace product during the process

- Check the gap between the loops stitched during the process is maintaining the same distance. If the gap is more in some area identify the stitch count made in each row. Rectify this gap by forming an extra stitch in the gap as explained earlier.
- Identify if any loop length variation is found in each row. Identify if there is any long and short stitch found in a single row.

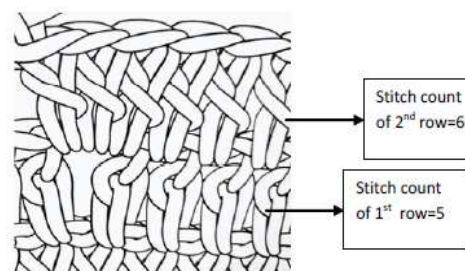


Fig. 4.3.11 Slip stitch making

II Identification of fault after completing the crocheted lace product

- Check the shape of the final product. Whether it conforms to correct shape or frilled due to improper tension.
- Check whether the design of the product meets the specification
- Check the bead and sequins attached in the lace are placed evenly
- Identify whether the edge of the crochet is finished by making knot in loop as shown in figure. 4.3.12 to 4.3.13

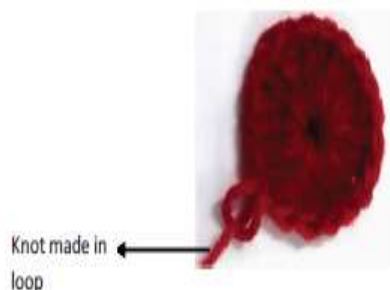


Fig. 4.3.12 Slip stitch knotting

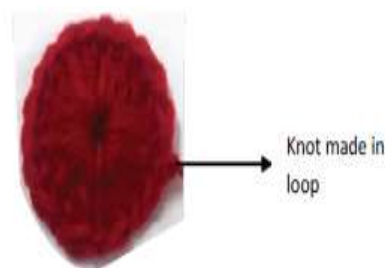


Fig. 4.3.13 Slip stitch finishing

Exercise



I. Answer the following questions.

1. What are the faults generally made in a lace product?

II. State whether the following statements are True or False.

1. Stitch tension can be adjusted by varying crochet hook size.

True

False

2. Loop length variation in lace is caused by improper tension of thread/yarn.

True

False

Notes





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.

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



<https://www.youtube.com/watch?v=TjZZFIHvkhU>

Working in a Team

Unit 5.1: Working in a Team

Unit Objectives

At the end of this unit, 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

5.1.1 Why work in teams?

There are several good reasons:

- Research shows that we all learn effectively from each other. Hence, your teams should be learning teams, with the focus on helping each other to learn.
- Teams are much more effective than individuals for work on complex projects.
- Teamwork develops your interpersonal skills in coping with conflict, in being a chairperson, in developing your interdependence and accountability and in developing your sense of self-esteem. This aids your personal development and your non-work-related relationships.

5.1.2 Effective teams

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

This difference stems very much from the processes within the group - its inner dynamics or workings. The features of an effective team include:

- combined group effort of all members
- clear goals
- group members focused on learning
- mutual trust and support
- open communication
- democratic processes.

5.1.3 Making the most of your team

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

- Become actively. Don't wait for another team member to do all the work.
- Share - open communication and the contribution of ideas and information is essential for successful and highly performing teams.
- Learn to work cooperatively. The success of your team will depend on helping each other.
- Respect your fellow team members. Be aware that each team member will have unique talents and ways of learning. Not everyone learns by the same process.
- Use your time productively and effectively. Define clear goals - what needs to get done, by whom and why?
- Expect success - be enthusiastic and positive.
- Meet with your group members regularly.
- Ask your tutor for frequent feedback - that's the tutor's role.
- Maintain a sense of humour - keep things in perspective.
- Hang in there - developing a good team is hard work and demands commitment from all team members.

5.1.4 Group development Process

There is strong evidence that groups pass through a sequence of five stages of 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 takes to pass through each of these developmental stages will vary, but it is generally not possible to achieve high team performance until the 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, leadership, organizational climate, and external climate.

Forming *Am I a member of this group?*

During this stage of group development new team members discover what being a member of this group means.

You may find that you and/or other group members need:

- clear goals and objectives
- definition of tasks and roles
- clear work plans
- to identify group behaviour, standards and norms and ways to handle behavioural problems

You and/or other group members may:

- 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.

Storming *Who controls this group?*

During this stage of group development, team members may become hostile or overzealous to express their individuality and resist group formation.

You may find that you and/or another group members exhibit:

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

You and/or other group members may:

- set unrealistic goals
- resist the task demands
- establish a pecking order
- criticize group leaders or other group members
- complain.

Many groups do not develop beyond this stage because they lack the ability to listen to each other and find mutually acceptable resolutions to the major issues.

Norming *What are the rules of this group?*

During this stage of group development, members accept the team, the team norms, their own roles and the idiosyncrasies of fellow group members. Emotional conflict is reduced by patching up previously conflicting relationships.

You and/or other group members may:

- Attempt 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

During this stage, if the formally appointed leader is not effective, or there is no formal leader, a leader will emerge or should be agreed upon who can focus the group resources to solve problems.

Performing *How high can this group go?*

Now that the team has established its interpersonal norms, it becomes an entity capable of diagnosing and solving problems, and making decisions. This stage is not always reached by all teams.

You and/or other group members may:

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

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

Mourning *Where do we go from here?*

This final stage of group development applies more to temporary teams like task groups or committees. However, these days, with reorganisations occurring frequently this stage is not uncommon.

You and/or other group members may:

- feel elated at the successful attainment of goals
- feel disappointed at unattained goals
- feel a sense of loss when the group is disbanded
- feel relief at the end of the process
- congratulate each other
- celebrate.

McGourty, J & DeMeuse, KP 2001, Team developer: an assessment and skill building program, John Wiley & Sons

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?

6. Work Area Management

Unit 6.1 – Work Area Management



Key Learning Outcomes

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

1. Understand the importance of managing workplace.
2. Perform various tasks to manage workplace

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



<https://youtu.be/WWp30gIVGrM>

Work Area Management

Unit 6.1: 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 off waste safely in the designated location
11. Store cleaning equipment safely after use
12. Carry out cleaning according to schedules and limits of responsibility

6.1.1 Reasons to Manage Workplace

A clean workplace means more than just having a sparkling, fresh building. A clean workplace also ensures the safety and health of employees and visitors. In 2012 alone, nearly 3 million nonfatal workplace injuries and illnesses were reported by private industry employers. Workplace injuries can be prevented by taking action to ensure a clean, safe work environment.

Here are six reasons why a clean workplace also means a safe workplace:

1. **Clean, dry floors to prevent slips and falls.**

Maintaining clean, dry floors is essential for the prevention of slips and falls in the workplace. Different categories of floor cleaners serve different purposes. For example, alkaline cleaners are good for cleaning restaurant floors while acidic cleaners remove rust, scale, and oxides from floors. However, some products may contain chemicals that can be detrimental to your flooring, so be sure to talk with a cleaning professional about what is best for your facility. In addition, keep your floors dry by using absorbent materials, such as floor mats, in functional locations to remove moisture and soil from the bottom of shoes.



Figure 6.1.1 Using Mop on floor

2. Disinfectants prevent the spread of germs and illness, including the flu.

Germs can easily spread throughout a workplace, particularly during flu season—but disinfecting surfaces and objects with EPA-registered, hospital-grade disinfectants can stop germs in their tracks.



Figure 6.1.2 Applying Disinfectants on work area

3. Proper air filtration lowers employee exposure to hazardous substances.

You may not see them, however dusts associated vapours are venturous substances that may produce an unsafe atmosphere for workers. Building ventilation is one necessary step you should think about for reducing transmission mechanism of metabolic process infections and maintaining the health and productivity of staff. Frequently exchange HVAC system filters to prevents them from turning into saturated, that could lead on to potential microbe growth and odour considerations.

Vacuum cleaners fitted with HEPA filters can also capture fine particles. Maintaining humidness around thirty to fifty % through the employment of a dehumidifier is additionally necessary in eliminating air pollutants and promoting clean air within the geographical point.



Figure 6.1.3 Air Filtration

4. Clean light fixtures improve lighting efficiency.

Dirty lighting fixtures will scale back essential light-weight levels, creating it troublesome and unsafe for workers to complete their daily tasks. Clean lighting fixtures considerably improve lighting potency within the work. Well-lit stairways and aisles also are vital in preventing accidents and maintaining a secure work atmosphere.



Figure 6.1.4 Cleaning Light bulbs

5. Green cleaning products are safer for both your employees and the environment.

Not all cleaning products are the same, and some are held to a higher standard than others. Products with third-party certifications, such as Green Seal or GREENGUARD, must meet specific standards and guidelines, which ensures they're safer for both people and the environment. Also make sure you maintain and review Material Safety Data Sheets (MSDS) for proper handling and storage of the products used in your facility.

**6. Proper disposal of waste and recyclable materials keeps work areas clutter-free.**

Allowing trash to gather not solely produces litter, however it conjointly presents a parcel for pests that cause a threat to your work surroundings. Putting “no-touch” wastebaskets in key locations throughout your facility ensures materials square measure disposed of and reduces the unfold of germs. Use materials victimization clearly tagged waste receptacles can jointly make a lot of property surroundings.



6.1.2 Benefits of Managing Workplace Properly

Effective geographical point management results in:

- reduced handling to ease the flow of materials
- fewer tripping and slipping accidents in clutter-free and spill-free work areas
- decreased health hazards
- lower employee exposures to risky substances (e.g., dusts, vapours)
- better management of tools and materials, together with inventory and provides
- more economical instrumentality clean-up and maintenance
- better sanitary conditions resulting in improved health
- more effective use of area
- reduced property injury by rising preventive maintenance
- less janitorial work
- improved morale
- improved productivity (tools and materials are simple to find)



6.1.3 Planning Good Housekeeping program

A good housekeeping program plans and manages the orderly storage and movement of materials from purpose of entry to exit. It includes a fabric flow commit to guarantee smallest handling. The set up conjointly ensures that employment areas don't seem to be used as storage areas by having employees move materials to and from work areas. A part of the set up might embrace finance in further bins and a lot of frequent disposals.



The costs of this investment could be offset by the elimination of repeated handling of the same material and more effective use of the workers' time. Often, ineffective or too little storage designing leads to materials being handled and hold on in venturesome ways. Knowing the set-up layout and therefore the movement of materials throughout the geographical point will facilitate plan work procedures.

Worker training is an essential part of any good housekeeping program. Workers need to know how to work safely with the products, they use. They also need to know how to protect other workers such as by posting signs (e.g., "Wet - Slippery Floor") and reporting any unusual conditions.

Housekeeping request is "kept up" not "accomplished." Cleaning and association must be done routinely, not exactly toward the finish of the move. Coordinating housekeeping into employments can help guarantee this is finished. A decent housekeeping program recognizes and relegates obligations regarding the accompanying:

- clean up amid the move
- day-to-day tidy up
- waste transfer
- removal of unused materials
- inspection to guarantee tidy up is finished

Keep in mind off the beaten path places, for example, racks, storm cellars, sheds, and engine compartments that would some way or another be ignored. The precise course of action of operations, devices, gear and supplies is a vital piece of a decent housekeeping program.

The final addition to any housekeeping program is inspection. It is the only way to check for deficiencies in the program so that changes can be made.

6.1.4 Elements of House Keeping

Dust and Dirt Removal

In a few employments, fenced in areas and fumes ventilation frameworks may neglect to gather tidy, soil and chips enough. Vacuum cleaners are appropriate for expelling light tidy and earth. Modern models have extraordinary fittings for cleaning dividers, roofs, edges, hardware, and other difficult to-achieve places where tidy and earth may amass.



Figure 6.1.5 Performing Housekeeping

Unique reason vacuums are helpful for evacuating dangerous substances. For instance, vacuum cleaners fitted with HEPA (high effectiveness particulate air) channels might be utilized to catch fine particles of asbestos or fibre glass.

Hosing (wetting) floors or utilizing clearing mixes before clearing decreases the measure of airborne clean. The tidy and grime that gather in places like racks, channelling, conductors, light installations, reflectors, windows, pantries and lockers may require manual cleaning.

Compacted air ought not be utilized for evacuating dust, earth or chips from hardware or work surfaces.

Employee Facilities

Worker offices should be sufficient, spotless and all around kept up. Lockers are vital for putting away representatives' close to home effects. Washroom offices require cleaning once or more each move. They additionally need a decent supply of cleanser, towels in addition to disinfectants, if necessary.

If laborers are utilizing perilous materials, worker offices ought to give unique precautionary measures, for example, showers, washing offices and change rooms. A few offices may require two locker rooms with showers between. Utilizing such twofold locker rooms enables specialists to shower off work environment contaminants and keeps them from sullying their "road garments" by keeping their work garments isolated from the apparel that they wear home.



Figure 6.1.6 Protection clothes for workshop

Smoking, consumption of alcohol or eating at the work territory got to be restricted wherever toxic materials are being used. The consumption zone should be independent from the work region and got to be cleansed at every shift.

Surfaces

Floors: Poor floor conditions are a leading cause of accidents. Cleaning up spilled oil and other liquids at once is important. Allowing chips, shavings and dust accumulated can also cause accidents. Trapping chips, shavings and dust before they reach the floor or cleaning them up regularly can prevent their accumulation. Areas that cannot be cleaned continuously, such as entrance ways, should have anti-slip flooring. Keeping floors in good order also means replacing any worn, ripped, or damaged flooring that poses a tripping hazard.

Walls: Light-coloured walls reflect light while dirty or dark-coloured walls absorb light. Contrasting colours warn of physical hazards and mark obstructions such as pillars. Paint can highlight railings, guards and other safety equipment, but should never be used as a substitute for guarding. The program should outline the regulations and standards for colours.

Maintain Light Fixtures

Dirty light fixtures reduce essential light levels. Clean light fixtures can improve lighting efficiency significantly.

Aisles and Stairways

Paths must be sufficient to suit individuals and vehicles serenely and securely. Walkway space considers the development of individuals, items and materials. Cautioning signs and mirrors can enhance locate lines in dazzle corners. Orchestrating passageways legitimately urges individuals to utilize them with the goal that they don't take alternate routes through risky territories.

Keeping paths and stairways clear is vital. They ought not be utilized for brief "flood" or "bottleneck" stockpiling. Stairways and walkways likewise require sufficient lighting.

Spill Control

The best way of spills management is to prevent them before they happen. Frequently clean-up and maintaining machines and instrumentality is a way. Another is to use drip pans and guards wherever attainable spills may occur. Once spills do occur, it's necessary to wash them up straightaway.

Absorbent materials are helpful for wiping up greasy, oily or different liquid spills. Used absorbents should be disposed of properly and safely.

Tools and Equipment

Tool housework is extremely necessary, whether within the tool space, on the rack, within the yard, or on the bench. Tools need appropriate fixtures with marked locations to supply orderly arrangement, each within the tool space and close to the work bench. Returning them promptly when use reduces the possibility of being misplaced or lost. staff ought to often examine, clean and repair all tools and take any broken or worn tools out of service.



Figure 6.1.7 Placing tools in Toolbox

Maintenance

The maintenance of buildings and instrumentation could also be the foremost vital part of fine housekeeping. Maintenance involves keeping buildings, instrumentation and machinery in safe, economical operating order and in sensible repair. This includes maintaining healthful facilities and often painting and improvement walls. Broken windows, broken doors, defective plumbing and broken floor surfaces will create a geographic point look neglected; these conditions will cause accidents and influence work practices. So, it's vital to interchange or fix broken or broken things as quickly as potential. a decent maintenance program provides for the scrutiny, maintenance, repairs and repair of tools, equipment, machines and processes.

Waste Disposal

The regular assortment, grading and sorting of scrap contribute to sensible work practices. It conjointly makes it attainable to separate materials which will be recycled from those getting to waste disposal facilities.

Allowing material to make au fait the ground wastes time and energy since beyond regular time is needed for clean it up. putting scrap containers close to wherever the waste is created encourages orderly waste disposal and makes assortment easier. All waste receptacles ought to be clearly tagged (e.g., useful glass, plastic, rubbish, etc.).

Storage

Great association of put away materials is basic for conquering material stockpiling issues whether on a brief or changeless premise. There will likewise be less strain wounds if the measure of dealing with is decreased, particularly if less manual materials movement is required. The area of the stockpiles ought not meddle with work but rather they should in any case be promptly accessible when required. Put away materials ought to permit no less than one meter (or around three feet) of clear space under sprinkler heads.

Stacking containers and drums on a firm establishment and cross tying them where important, diminishes the possibility of their development. Put away materials ought not block walkways, stairs, exits, fire gear, crisis eyewash wellsprings, crisis showers, or medical aid stations. All stockpiling ranges ought to be plainly checked.



Figure 6.1.8 Cabinet for dangerous items

Flammable, combustible, toxic and other hazardous materials should be stored in approved containers in designated areas that are appropriate for the different hazards that they pose. Storage of materials should meet all requirements specified in the fire codes and the regulations of environmental and occupational health and safety agencies in your jurisdiction.

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. Discuss the main elements of house-keeping?

Key Learning Outcomes



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

1. Identify the common safety measures while working in studio.
2. Describe the benefits of health.
3. Describe the measures to be taken to maintain hygiene in workshop.
4. Describe about the common accidents that occur in workshop.
5. Describe the preventive measures to be taken to minimize accidents.
6. Learn the procedure to use fire extinguisher
7. Learn the ingredients of First-Aid Kit.
8. Learn the methods of giving First-Aid in case of accident.

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



https://www.youtube.com/watch?v=VYvNH_sQOPi

Safety, Health and Hygiene

Unit 7.1: Safety, Health and Hygiene

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

7.1.1 General Safety Rules

7.1.1.1 Work intelligently

Substitute safer materials when possible.

Choose water-based products over solvent-based products.

Choose products that do not create dusts and mists.

Never hold brushes or tools in your mouth, tip brushes with your lips, etc.

Never eat, drink, or smoke in studios.

Store tools properly; keep them in good condition.

Read the labels on your materials. You cannot tell the toxicity of materials by the absence or presence of a smell.

Never use materials in unintended ways. For example, don't use standard paint for skin painting.

7.1.1.2 Keep studio space neat and orderly

Keep floors clean and free of slippery spots.

Keep extension cords, hoses and other tripping hazards off the floor when unused; keep traffic ways clear.

Minimize the area in which hazardous substances are used.

Keep art studios separate from living areas and clean yourself before entering living areas.

7.1.1.3 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.

7.1.1.4 Have proper protective gear and cleaning supplies available.

Wear special work clothes and keep separate from other clothing, even during clothes washing.

Keep cleaning supplies accessible.

Clean up spills immediately, even small spills, and dispose of waste chemical and clean-up materials properly.

Contain flammable spills with activated charcoal, diatomaceous earth, or deodorant-free cat litter.

In the event of an accidental exposure call the National Poison Control Centre Hotline or the number for the nearest certified Poison Control Centre.

7.1.1.5 Wash hands and other exposed body parts after working, and before eating or using the bathroom

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.

7.1.1.6 Maintain your health and fitness

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.

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

7.1.2 General Hazards Associated with Metal Working

7.1.2.1 General Hazards and Safety in Anodizing

- The primary electrolytes used are sulfuric, oxalic, and chromic acids, which are corrosive and may be toxic by inhalation, ingestion, and skin/eye contact.
- Read the product label. When possible, choose the safest materials available (e.g., those with few or no cautionary/warning labels).
- Metal cleaners contain caustics (sodium hydroxide) which may be toxic by inhalation, ingestion, and skin/eye contact.
- Some metals are flammable. Be aware of potential fire hazards.
- To avoid electrocution while working with electrical equipment, use ground fault circuit interrupter (GFCI)– protected electrical outlets.
- Wear appropriate protective gloves, goggles, and apron.

7.1.2.2 General Hazards and Safety in Electroplating

- Ingredients in electrolytic solutions include copper sulphate, sulfuric acid, and cyanide.
- Read the product label. When possible, choose the safest materials available (e.g., those with few or no cautionary/warning labels).
- Cyanide salts can be toxic by ingestion, inhalation, or skin absorption.
- Avoid cyanide plating solutions. If used, ensure appropriate ventilation for this activity, be familiar with the hazards, and alert your local emergency room to have a cyanide kit available.
- Sulfuric acid (> 10%) is corrosive on contact with the skin/eyes, mucous membranes, respiratory and gastrointestinal tracts.
- Wear protective clothing, chemical splash goggles, and gloves.

7.1.2.3 General Hazards and Safety in Forging or Smithing

- Furnaces used for forging with heat may release metal fumes and toxic gases (e.g., carbon monoxide) and infrared radiation.
- Be aware of fire and thermal hazards. Practice fire prevention (e.g., store combustibles away from heat, install sprinklers, obtain a fire extinguisher, etc.).
- Ensure appropriate ventilation for this activity.
- Install carbon monoxide alarms.
- Wear protective clothing, gloves, earplugs, and infrared goggles or a face shield.

7.1.2.4 General Hazards and Safety in Foundry

- Mould types include channel, cuttlebone, sand, and lost wax.
- Read the product label. When possible, choose the safest materials available (e.g., those with few or no cautionary/warning labels).
- Potential hazards associated with mould making include exposure to the materials or contaminants like Silica, Formaldehyde, Isocyanides, Asbestos, and Resins.
- Avoid casting in lead.
- Potentially toxic gases, including hydrogen cyanide and carbon monoxide, may form depending on the mould used.
- Ensure appropriate ventilation for this activity and/or use a respirator.
- Wear protective clothing, gloves, and goggles.
- Clean dust and mould materials with a wet mop or sponge

7.1.2.5 General Hazards and Safety in Gilding

- Read the product label. When possible, choose the safest materials available (e.g., those with few or no cautionary/warning labels).
- Avoid using mercury, if possible. Heating the amalgam of mercury with gold and/or silver will release mercury vapor which may be toxic if inhaled.
- Potential health effects from inhalation exposure to mercury include swollen gums, vomiting, diarrhoea, kidney failure, bronchitis, pneumonitis, and nervous system problems.
- Avoid prolonged or repeated skin contact with mercury because it may cause allergic contact dermatitis.
- Ensure appropriate ventilation when working with mercury.
- Carefully store mercury in closed containers and thoroughly clean up all spills with special kits. Only vacuum with equipment designed to pick up mercury.

7.1.2.6 General Hazards and Safety in Grinding and Polishing

- Read the product label. When possible, choose the safest materials available (e.g., those with few or no cautionary/warning labels).
- Avoid using metals that may be highly toxic such as lead and cadmium.
- Wear appropriate clothing and eye protection.
- Ensure appropriate ventilation for this activity to avoid exposure to metal dust and fumes.
- Clean by wet mopping or with a HEPA vacuum. Do not sweep dust.

7.1.2.7 General Hazards and Safety in Melting/pouring metal

- Furnace and metal fumes may be toxic if inhaled.
- Read the product label. When possible, choose the safest materials available (e.g., those with few or no cautionary/warning labels).
- Be aware of fire and thermal hazards. Practice fire prevention (e.g., store combustibles away from heat, install sprinklers, obtain a fire extinguisher, etc.).
- Ensure appropriate ventilation for this activity.
- Install carbon monoxide alarms.
- Furnaces can cause heat stress and emit infrared radiation.
- Wear protective clothing, gloves, and eye protection.

7.1.2.8 General Hazards and Safety in Niello

(Involves decorating or inlaying an incised design on metal with black metallic alloys of sulphur with lead, copper or silver):

- Inhalation of lead sulphide dust from grinding or lead fumes from heating is toxic.
- Ensure appropriate ventilation for this activity and/or use a National Institute for Occupational Safety and Health (NIOSH)-approved respirator.
- Wear protective clothing and eye protection.

7.1.2.9 General Hazards and Safety in Patina

(A green or brown colouring of metal produced by natural or chemically induced oxidation)

- Numerous patina chemicals are available including ammonium sulphide, ammonium hydroxide, acetic acid, hydrochloric acid, barium sulphide, chromium VI compounds, copper compounds, ferric chloride, hydrogen peroxide, lead acetate, liver of sulphur (potassium sulphide), nitric acid, oxalic acid, potassium ferricyanide, sodium hydroxide, and zinc chloride.
- Read the product label. When possible, choose the safest materials available (e.g., those with few or no cautionary/warning labels).
- Many patina chemicals may be toxic by ingestion, inhalation, and/or skin/eye contact.
- Wear protective clothing and eye protection.

7.1.2.10 General Hazards and Safety in Pickling

(A method of cleaning metal using chemicals (e.g., dilute inorganic acid solutions))

- Components may include sulfuric acid, nitric acid, hydrofluoric acid, and sodium bisulphate.
- Read the product label. When possible, choose the safest materials available (e.g., those with few or no cautionary/warning labels).
- Concentrated acid solutions are corrosive and some, such as hydrofluoric acid, may cause toxicity throughout the body (e.g., hypocalcaemia, metabolic acidosis, hyperkalaemia, and cardiac dysrhythmias).
- Avoid cyanide-containing metal cleaning solutions.
- If possible, use steel wool to clean metal instead of chemicals.
- Wear protective clothing, gloves, eye protection, and apron and have an eyewash fountain and emergency shower available when using concentrated acids.
- Ensure appropriate ventilation for this activity and/or use a National Institute for Occupational Safety and Health (NIOSH)-approved respirator.

7.1.2.11 General Hazards and Safety in Soldering

- Metals (e.g., cadmium, lead, silver, antimony, and zinc), fluxes (e.g., zinc chloride, rosin, and fluoride), and cleaners/degreasers (e.g., solvents and acids) used in the soldering process may be toxic.
- Read the product label. When possible, choose the safest materials available (e.g., those with few or no cautionary/warning labels).
- Use lead-free and cadmium-free solder.
- Various fluxes are available including those with acid, borax, fluoride, and rosin. Do not mix fluxes because potentially toxic vapours may form. Avoid fluxes with fluoride.
- Silver salts may discolor the skin, eyes, and mucous membranes. Some silver salts are irritants and others may be corrosive (e.g., silver nitrate).
- Wear eye protection and gloves.
- Ensure appropriate ventilation for this activity.

7.1.3 Health

As defined by World Health Organization (WHO), Health is a "State of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity." Health is a dynamic condition resulting from a body's constant adjustment and adaptation in response to stresses and changes in the environment for maintaining an inner equilibrium called homeostasis.

7.1.3.1 Staying Mentally Healthy

Keep your mind limber. In addition to the fact that staying mentally active is emotionally rewarding, studies have shown that there is a correlation between mentally challenging activities and a decreased risk of Alzheimer's. Never stop learning, even if you feel like you're "past your prime."

There are some simple ways you can exercise your mind. For example, you can try taking a different route to work, or brush your teeth with the hand you don't normally use.

Read more, and challenge yourself with your reading selection. Alternate between reading those pulp mystery novels you love, and classics like selections by Hemingway, Twain, and London.

Solve puzzles and play games of strategy. These sorts of games engage you mentally. You could also learn to play an instrument. These activities have been linked to improved memory.



Figure 7.1.1 Trying New Ideas

Strengthen your relationships. Prioritize developing meaningful relationships above just being social. Surround yourself with humans that enrich your life and make you satisfied. Exercise self-disclosure, which means that sharing matters which can be unique to you (your thoughts, fears, favourite movies and tune, pet peeves, and many other things.) with those you accept as true with. This has been proven to be of tremendous significance to not handiest forging deeper interpersonal connections, however additionally feeling validated emotionally.

Learn how to have a healthy relationship. Be open about what you are feeling, try to understand what others are feeling, and be willing to compromise. If you think you're in a manipulative or controlling relationship, get out of it. It's better to stand strong on your own than being held back by a companion.

Make the time to remain connected to your friends. This doesn't simply mean posting a YouTube video to their Facebook page each once in an exceedingly whereas. If you reside far-flung from your friends, take the time to meet them once each week. If you reside close to your best friends, create time hebdomadally to prevent in and catch up (even if you each have busy work weeks/families etc.). Friends cause you to laugh, and riant is additionally a vital a part of health.



Figure 7.1.2 Strengthen Relations

Pursue your passions. Get some time to exercise any musical instrument, do an art undertaking, take pics, construct models, bake cakes, or something else that enriches your free time. If you need to research something new, take the night-time or weekend elegance. If you may consider something thrilling off the top of your head, take some time to discover a hobby.

If you're convinced that there isn't enough time within the day to pursue any activities, try and decrease on a time-wasting activity like channel-surfing or touching refresh on Facebook. you'll be shocked by what proportion time you really pay ahead of a screen after you can be doing different things.

Join a gaggle or club. Meeting up with those that share a standard interest can each get you out of the house and boost your sense of happiness. be part of a book club, a sports team, or a walking cluster. devour a community newspaper to seek out listings of clubs set in your space.



Figure 7.1.3 Pursuing Passion

Learn how to understand your emotions. It is vital to bear in mind of what you're feeling. once you area unit connected along with your emotions; you'll be able to each acknowledge once you area unit acting out attributable to your emotions and understand a lot of completely with others. Knowing yourself may be a key a part of having sensible mental health --it's vital to understand once one thing is creating you sad so you'll either fix it or cut it out of your life. Likewise, it's additionally sensible to acknowledge the items that cause you to happy. close yourself with sensible energy can promote a happier, healthier you.

Go to a meditation cluster and find out how to focus your mind on the positive. Speak with a expert World Health Organization can assist you kind through your emotions. register in associate degree emotional awareness course that teaches you to acknowledge, accept, and perceive your emotions.

Learn a way to address emotional pain and, if necessary, affect emotional abuse. Speak with a healer or somebody you trust. Bottling up your feelings can solely build your condition additional untidy.



Figure 7.1.4 Performing Meditation

7.1.3.2 Staying Physically Healthy

Maintain healthy eating habits. Avoid fad diets—they are often incredibly unhealthy. To get all the nutrition the human body needs, you must eat a balanced diet including dairy, grains, protein, fruits and veggies, as well as fat (yes, even fat!). By doing so, you'll have a healthy heart, healthy brain, and a fully functional immune system. Eating highly varied foods will also help insure you get all the vitamins, minerals, oils, and enzymes your body craves.

To lose weight, you must burn more calories than you consume. That's all there is to it. With the exception of sweets, eliminating one area of the food pyramid from your diet won't replace the need to simply consume fewer calories.

Avoid skipping meals, which is hard on the body. Some people even recommend eating up to six mini meals a day instead of three large ones, which can sustain energy and steady blood-sugar levels; however, many people end up turning their “mini meals” into junk food sessions and end up consuming not just more calories, but emptier ones. Be honest with yourself before making this choice.

If you want to work on portion control, eat low energy-density foods (i.e., more substance, fewer calories). Fruits and vegetables, for example, are packed with not only vitamins and minerals, but also water and fibre, making them take longer to digest and keeping you full longer.



Figure 7.1.5 Healthy Food

Drink more water. Water helps flush metabolic wastes to keep your metabolism in top shape. Water can also help you feel fuller, so drink at least a half-gallon (2 litres) of water every day (or more if you are active or live in a hot climate).

Try to drink water that has been purified. Tap water often contains things like chlorine and fluoride that reduce the health benefits of drinking water.



Figure 7.1.6 Drink more water

Sleep well every night. Adults should get 7 to 9 hours daily, whereas school-aged children should get 10 to 11. One of absolutely the most significant ways that of up the standard of your sleep is to try to do it in complete darkness, as even little amounts of sunshine interfere with the chemicals that tell your body to rest. If you can't eliminate the sunshine in your area, wear a watch mask. Another one amongst the most effective ways that to enhance your sleep is to exercise.

Sleeping is also a good way to prevent overeating. A study by The American Journal of Clinical Nutrition demonstrated that men who only slept for 4 hours consumed, on average, 500 more calories than they did after sleeping for 8.



Figure 7.1.7 Sleep Well

Stick to an exercise regimen. If you don't want to pay for a gym membership, try strength-training at home. The muscle you develop will help increase your metabolism: the bodies of muscular people burn more calories even while they're at rest. To help you stick to your regimen, keep a workout journal. Plan out when and where you will work out each week and stick to it. Each time you work out, write down what you did and for how long.

To keep your heart in shape, do cardio. One particularly effective way to improve your cardiovascular health is to do interval training, which means alternating between low- and high-intensity activity. It is proved to be a quick and extremely effective way to improve heart health and endurance. (Anyone over the age of 60 or who has heart disease, high blood pressure, or arthritis should consult a doctor before attempting interval training.)



Figure 7.1.8 Regular Exercises

Limit your vices. Quit smoking, beat drug addiction, and, if necessary, stop drinking. Avoid other risky behaviours like speeding, fighting, unsafe sex, and excessive thrill-seeking.



Figure 7.1.9 Limit your bad habits

7.1.4 Maintaining Personal Hygiene

Personal hygiene involves those practices performed by an individual to care for one's bodily health and wellbeing, through cleanliness. Follow are some common practices to maintain hygiene in personal life.

Brush your teeth twice a day. Even if you're in a hurry, brushing your teeth will remove bits of food, bacteria, and stains that can cause problems if left to fester. Try brushing once in the morning and once before you go to bed, and spend at least two minutes each time you brush.

If you are constantly on the go, have a travel toothbrush in your purse or briefcase so you can pop into the bathroom at work.

Spend enough time to brush the front, back, and tops of your teeth, especially the molars.



Figure 7.1.10 Brush Teeth Regularly

Floss at least once a day. Your dentist is not lying when he says this is one of the most overlooked hygiene regiments. Regular flossing cleans the parts of your teeth a brush can't reach and stimulates healthy gum growth.

Using a short piece of floss, get in between your teeth and along the gum line, using your fingers to add pressure.

Take to your orthodontist about ways to floss if you have braces, such as dental threads.

Be sure to clean in between your back teeth too, using the floss around all sides of the molars.

Mouthwash does not physically remove plaque and food and is not a substitute for flossing.



Figure 7.1.11 Clean Teeth Regularly

Schedule regular visits to the dentist. While going to the dentist every six months is not strictly necessary for healthy adults, children and those with dental issues should talk to their dentists about frequent check-ups. Monitor your teeth, note any changes or worrisome pains, and get your teeth professionally cleaned at a minimum of once year.

Smokers, diabetics, and people with a history of cavities should see the dentist twice a year or more.



Figure 7.1.12 Go for regular dental visits

Bathe or shower at least every two days. Bathing removes the oils, dirt, dead skin bacteria that you accumulate every day and is essential to having good hygiene. Showering frequently is the most important hygienic habit you can develop for your hair and skin.

If you don't have access to a shower, a cloth and some water will help remove dirt and irritants from your skin.

Showering too frequently can be bad for your skin as well -- once a day is enough.



Figure 7.1.13 Take bath daily

Take short, warm showers instead of long hot showers. Long showers don't only waste water and electricity; they can clog your pores and dry out your skin. The heat is also tough on your hair. A short shower is all you need and will promote healthy skin.



Figure 7.1.14 Take shower regularly

Wash your hands frequently. The majority of foods borne diseases are caused by human contamination, and the number one culprit are dirty hands. Protect yourself and people around you by washing your hands for 20 seconds using soap and warm water after using the bathroom, going outside, or handling food.

If possible, turn the faucet off with your elbow to prevent recontamination.



Figure 7.1.15 Clean Hands

Wash and disinfect your work surfaces regularly. The kitchen and the bathroom build up bacteria quickly, so stay ahead of the game by regularly wiping down your counter -tops, sinks, and toilets whenever they get dirty. Don't leave crumbs or food around your kitchen overnight, as this attracts ants and germs.

Use a disinfected spray in your bathroom and kitchen once every few weeks.

Dry surfaces after cleaning them so that they don't grow mould.

Don't forget to steam or disinfect your curtains and furniture at least once a year too.



Figure 7.1 16 Use Disinfectant

Open your windows when you can. Circulating fresh air around your workplace is good for your lungs and prevents bacteria from building up in the air. If you can't open your windows for long periods of time, like during the winter, use an aerosol spray with disinfectant if the work area smells stale or mouldy.



Figure 7.1.17 Open Windows

Wash your bedding every few weeks. Oil can build up on the sheets and cause acne and irritations. Dead skin cells, dirt from your feet and body, and bugs can also hang around in your sheets if you don't take the time to wash them. You shouldn't go more than two weeks without washing your sheets.

Having spare sheets that you can use while washing the other set makes you likely to change your sheets regularly.

Always wear clean clothes and underwear. Dirty clothes breed bacteria and will be smelly and uncomfortable. Wash clothes after wearing them and never put on sweaty or wet clothes.

Tight clothes are more likely to get dirty and trap sweat.

Remove tight or sweaty clothes soon after a workout to prevent build up.

UV from the sun is a powerful disinfectant that kills many bugs and bacteria.

Notes

Unit 7.2: Common Accidents and Prevention

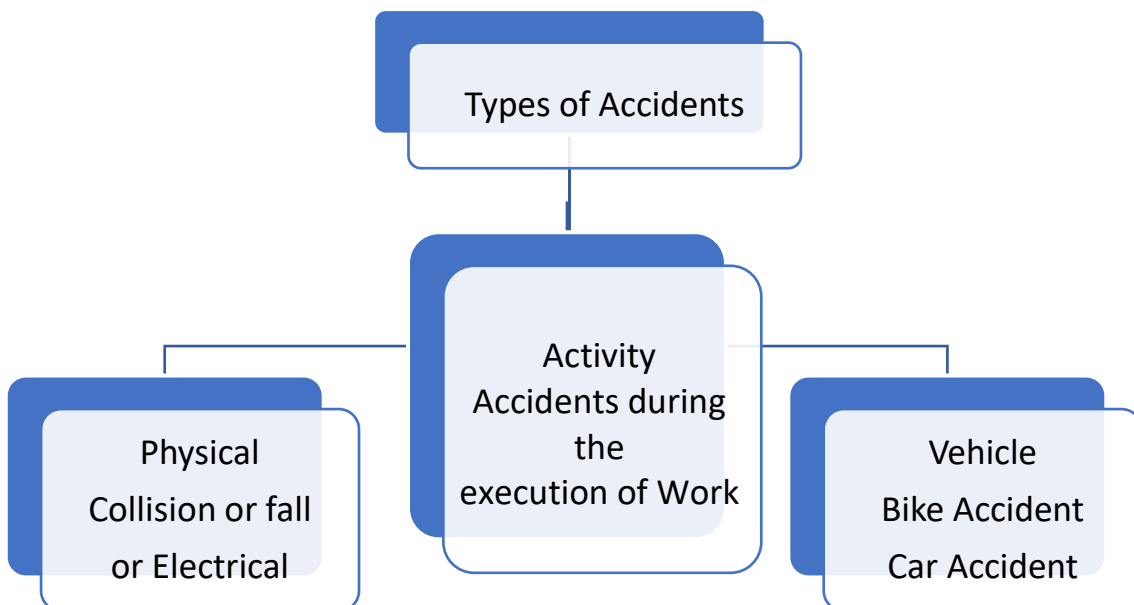
Unit Objectives

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

1. Know about the common accidents that occur in workshop.
2. Understand the preventive measures to be taken to minimize accidents.
3. Learn the procedure to use fire extinguisher
4. Learn the ingredients of First-Aid Kit.
5. Learn the methods of giving First-Aid in case of accident.

4.2.1 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.



7.2.1.1 Frequently occurring accidents/hazards on Workshop

Some of the more frequently encountered hazards include:

- Electrical hazards
- Hazard due to scissors and needle
- Falling object hazards
- Equipment failure
- Fire Hazard

7.2.2 What is a Fire Extinguisher?

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



Figure 7.2.1 Fire Extinguisher

7.2.2.1 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



Figure 7.2.2 Classification of Fire Extinguisher

7.2.2.2 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!!!!

7.2.3 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.

7.2.3.1 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 7.2.3 First aid box

7.2.4 Common Procedures for First Aid in various situations

7.2.4.1 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 7.2.4 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.

7.2.4.2 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 7.2.5 Minor wound

7.2.4.3 Bruising

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



Figure 7.2.6 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.

7.2.4.4 Shock

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

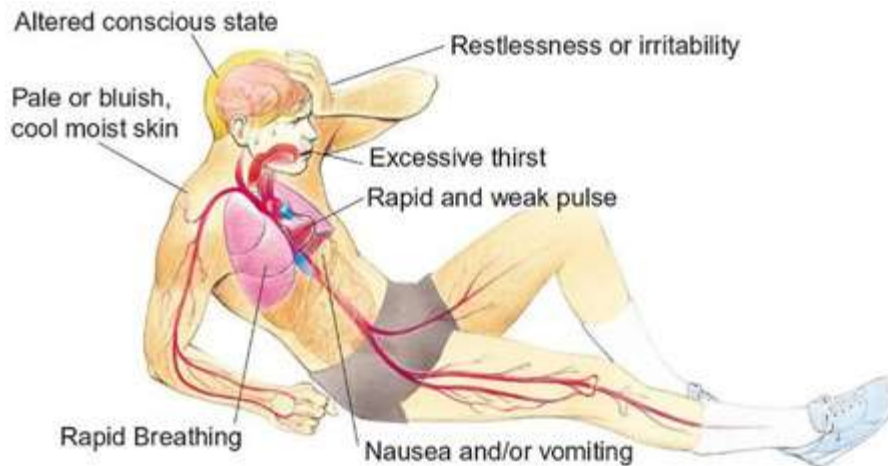


Figure 7.2.7 Shock

Signs and Symptoms:

- Dizziness, faint or weak feeling
- Rapid, shallow breathing
- Anxiety, restlessness, agitation, or confusion
- Cool and clammy to the touch
- Pale or greyish 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.

7.2.4.5 Burns

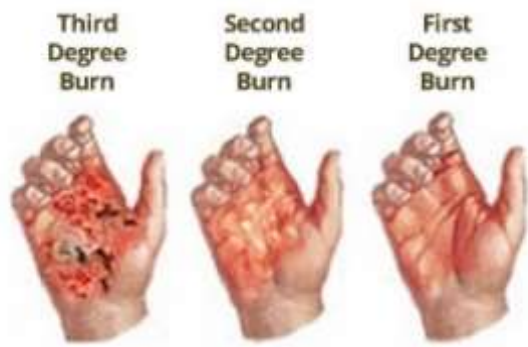


Figure 7.2.8 Burn

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.

7.2.4.6 Bites and Stings First Aid



Figure 7.2.9 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

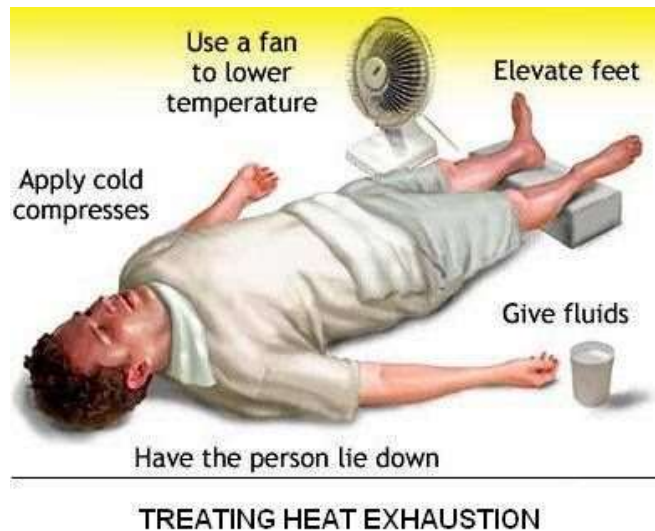
7.2.4.7 Heat Exhaustion First Aid

Figure 7.2.9 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.

7.2.5 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 7.2.10 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?

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

Employability and Entrepreneurship



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



<https://youtu.be/IK7cxNsH2W4>



<https://youtu.be/aGrEKVOoJug>







8. 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 2.1:	Error! Reference source not found.	https://www.youtube.com/watch?v=CWuLuftZko	3	 History of Hand Crocheted Textiles
		Error! Reference source not found.	Error! Reference source not found. Types of Handicraft Products		6	
		Error! Reference source not found.	Error! Reference source not found. An overview of crochet textile industry		10	
2.	Module 2. Prepare for Making Crochet Lace for Apparel, Accessories and Furnishing Products	Error! Reference source not found.	Error! Reference source not found. and material used for crocheting	https://www.youtube.com/watch?v=Do3o_eGknVE	18	 Prepare for Making Crochet Lace for Apparel, Accessories and Furnishing Products
		Error! Reference source not found.	Error! Reference source not found. Identify the crochet symbol		40	
3.	Module 3. Carry out the Crocheting Process for Apparel, Accessories and Furnishing Products	Error! Reference source not found.	Error! Reference source not found.	https://www.youtube.com/watch?v=7pnJJUvvFr8	Error ! Book mark not defined. 4	 Carry out the Crocheting Process for Apparel, Accessories and Furnishing
		Unit 3.2 Crochet Lace Making Process for Accessories	3.2.1 Identification of Raw Materials and Tools for Crocheting of		60	

			Accessories			Products
		Unit 3.3 Crocheting Process for Crochet Lace Furnishings	Unit 3.3.1 Identification of Raw Materials and Tools for Crocheting of Furnishings		68	
		Unit 3.4 Crocheting Process with Special Features and Storage of Crocheted Products	3.4.1 Crocheting Process with Special Features		75	
4.	Module 4. Contribute to Achieve Quality in Crochet Lace Making for Apparel, Accessories and Furnishing Products	Unit 4.1 - Quality Checking of Raw Material	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.	https://www.youtube.com/watch?v=SUWKe3oi5bc	84	 Contribute to Achieve Quality in Crochet Lace Making for Apparel, Accessories and Furnishing Products
	Unit 4.2 - Work Safety Measures to Maintain Work Flow Process	4.2.1 Work Safety Measures	90			
	Unit 4.3 - Quality checking of crocheted lace	4.3.1 Achieving Quality in Crochet Lace Making	92			
5.	Module 5. Working in a team	Error! Reference source not found.	Error! Reference source not found. Error! Reference source not found.	https://www.youtube.com/watch?v=TjZZFIHvkhU	100	 Working in a Team

6.	Module 6. Maintain work area & tools	Error! Reference source not found.	Error! Reference source not found. Error! Reference source not found.	https://youtu.be/WWp30glVGrM	109	 Work Area Management
7.	Module 7. Maintain health, safety and security at workplace	Error! Reference source not found.	Error! Reference source not found. Error! Reference source not found. Error! Reference source not found.	https://www.youtube.com/watch?v=YvNH_sQOPI	124	 Safety, Health, and Hygiene
			Error! Reference source not found.			
8	Module 8 Employability and Entrepreneurship	Unit: Employability and Entrepreneurship	8.1.1 Employability and Entrepreneurship	https://youtu.be/3gNbKtZXxco	153	  
				https://youtu.be/IK7cxNsH2W4		
				https://youtu.be/aGrEKVOoJug		



Skill India
कौशल भारत - कुशल भारत



**Handicrafts and Carpet
Sector Skill Council**

Address: OCF, Plot No. 2, Pocket 9, Sector B, Vasant Kunj, New Delhi – 110070
Landmark – Behind JIMS
Email: hcssc@hcssc.in
Web: www.hcssc.in
Phone: +91-11-26133165/26139834



978-1-111-22222-45-7

Price: