









TRAINER GUIDE

National Vocational Certificate Level 2





Published by

National Vocational and Technical Training Commission Government of Pakistan

Headquarter

Plot 38, Kirthar Road, Sector H-9/4, Islamabad, Pakistan www.navttc.org

Responsible

Director General Skills Standard and Curricula, National Vocational and Technical Training Commission
National Deputy Head, TVET Sector Support Programme, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Layout & design

SAP Communications

Photo Credits

TVET Sector Support Programme

URL links

Responsibility for the content of external websites linked in this publication always lies with their respective publishers. TVET Sector Support Programme expressly dissociates itself from such content.

This document has been produced with the technical assistance of the TVET Sector Support Programme, which is funded by the European Union, the Federal Republic of Germany and the Royal Norwegian Embassy and has been commissioned by the German Federal Ministry for Economic Cooperation and Development (BMZ). The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH in close collaboration with the National Vocational and Technical Training Commission (NAVTTC) as well as provincial Technical Education and Vocational Training Authorities (TEVTAs), Punjab Vocational Training Council (PVTC), Qualification Awarding Bodies (QABs)s and private sector organizations.

Document Version October, 2019 Islamabad, Pakistan



TRAINER GUIDE

Contents

Introduction	1
Lesson plans	2
Modelling of skill	2
Lesson Plan Template	4
Modules and Learning Units	6
Teaching & Learning Activities	8
Module 1: Demonstrate Communication Skills	8
Module 2: Maintain Safe Work Environment	16
Module 3: Perform Cutting Operations	19
Module 4: Prepare Small Parts of Leather Products	23
Module 5: Stitch Leather Garments	32
Module 6: Stitch Leather Gloves	43
Module 7: Perform Finishing Operations on Leather Products	49
Frequently Asked Questions	54
Test Yourself (Multiple Choice Questions)	57
ANSWERS	60

Introduction

Competence-based training helps to bridge the gap between what is taught in training and what tasks will be performed on the job. Training trainees to perform actual job functions helps to ensure that future front-line workers have the skills, knowledge and abilities required to perform their jobs properly, safely and effectively. In addition to competence-based training, assessment based on the performance of actual work competencies helps to ensure that:

- trainees are performing their work tasks as safely as possible
- performance gaps are recognized prior to serious incidents
- training can be implemented to improve competence.

There are significant benefits to competence-based training:

1. Cost effectiveness

Since training activities and assessments in a competence-based approach are goal-oriented, trainers focus on clearly defined areas of skills, knowledge and understanding that their own industry has defined in the competence standards. At the same time, trainees are more motivated to learn when they realize the benefits of improved performance.

2. Efficiency

The transfer gap between the training environment and working on the job is reduced substantially in a competence-based approach. This is because training and assessment are relevant to what needs to be done on the job. As a result, it takes less time for trainees to become competent in the required areas. This, in turn, contributes to improved efficiency where training and assessment are concerned.

3. Increased productivity

When trainees become competent in the competence standards that their own industry has defined, when they know what the performance expectations are and receive recognition for their abilities through successful assessments, they are likely to be more motivated and experience higher job satisfaction. The result is improved productivity for organizations. The communication and constructive feedback between future employers and employees will improve as a result of a competence-based approach, which can also increase productivity.

4. Reduced risk

Using a competence-based approach to training, development, and assessment, employers are able to create project teams of people with complementary skills. A trainee's record of the skills, knowledge and understanding relating to the competence standards they have achieved can be used by a future employer to identify and provide further relevant training and assessment for new skills areas. Competence standards can shape employee development and promotional paths within an organization and give employees the opportunity to learn more competencies beyond their roles. It can also provide organizations with greater ability to scale and flex as needed, thereby reducing the risk they face.

5. Increased customer satisfaction

Employees who have been trained and assessed using a competence-based approach are, by the definition of the relevant competence standards, able to perform the required tasks associated with a job. The knock-on effect is that, in service-related industries, they are able to provide high service levels, thereby increasing customer satisfaction. In production or manufacturing industries, they are able to work closely to industry standards in a more effective and efficient way.

Lesson plans

This manual provides a series of lesson plans that will guide delivery of each module for the *Stitcher* qualification. It is important for trainers to be flexible and be ready to adapt lesson plans to suit the context of the subject and the needs of their trainees.

Good teachers acknowledge that CBT means each and every trainee in the class learns at a different speed. The good teacher is prepared to throw aside the day's lesson plan and do something different (and unplanned) for the class even if it means 'writing' a lesson plan for each trainee to match their learning pace for that day or week.

Learning by doing is different from learning theory and then applying it. To learn to do something, trainees need someone looking over their shoulder saying 'it's not quite like that, it's like this', 'you do it like this because ...', or even 'tell me why you chose to do it like this?'

In this way, trainees learn that theoretical knowledge is meaningless if it is not seen in the context of what they are doing. In other words, if a trainee doesn't know why they do something, they will not do it competently (skills underpinned by knowledge = competent performer).

This is how a *Stitcher* acquires a practical grasp of the standards expected. It's not by learning it in theory, but because those standards are acquired through correction by people who show what the standards are, and correct the trainee where they do not meet those standards, and where they repeat it correction until they have internalised those standards.

Modelling of skill

Modelling (or demonstrating) a skill is a powerful tool, which is used in vocational training. The instructions for trainers for demonstration are as under:

- a) Read the procedure mentioned in the Trainer Guide for the relevant Learning Unit before demonstration.
- b) Arrange all tools, equipment and consumable material, which are required for demonstration of a skill.
- c) Practice the skill before demonstration to trainees, if possible.
- d) Introduce the skill to trainees clearly at the commencement of demonstration.
- e) Explain how the skill relates to the skill(s) already acquired and describe the expected results or show the objects to train ees.
- f) Carry out demonstration in a way that can be seen by all trainees.
- g) Use the same tools and materials that the learner will be using.
- h) Go through EACH of the steps involved in performing the skill.
- i) Go SLOWLY describe each step as it is completed.
- j) Encourage the learners to move around and watch what you are doing from a number of different angles.

- k) Identify critical or complex steps, or steps that involve safety precautions to be followed.
- I) Explain theoretical knowledge where applicable and ask questions to trainees to test their understanding.
- m) Try to involve the learners: Ask them questions about why they think the process may work that way.
- n) Repeat critical steps in demonstration, if required.
- o) Summarize the demonstration by asking questions to trainees.

Involvement in the process (actively seeing) is important at this stage. When you work on getting involved, getting people to participate, you make them a part of what is happening. Questions for clarification or explanation are important throughout the demonstration. It is up to the learners to ask questions about things they do not understand, but it is also important for trainers to seek out and elicit questions from learners. A trainer may need to do repeated demonstrations of difficult or complex skills.

Lesson Plan Template

Format of a Lesson Plan

Module 3: Perform Cutting Operations

Learning Unit

LU-1 Segregate various skin/hide types

Learning Outcomes

- Identify and mark defects in skin/hide
- Differentiate various shades of leather skin/hide correctly
- Measure skin/hide thickness using leather gauge meter
- Differentiate skins/hides as per their hardness

Methods	Key Notes	Media	Time
Presentation	Refer to the Trainer's Guide	Tools and equipment used for	Total: 20 Hours
Practical Demonstration		Segregate various skin/hide types	
Group Discussion			Theory: 14 Hours
Practice Sessions			Practical: 06 Hours

Introduction

This session shall introduce learners to the tools, techniques and material used for segregating various skin/hide types using presentation, demonstration, question and answer, and practical skills development.

Main Body

- Learning to differentiate between leather & Synthetic material
- Understanding of various leather types
- Understanding of various leather skin/hide quality parameters (shade, grain, split, Colour matching stretch-ability, Softness / hardness, thickness etc.)
- Knowledge of various defects in skin/hide (butcher cuts, warble fly, tick marks etc.)
- Learning about Leather measurement techniques; usage of Gauge meter & measuring tools
- Understanding about parts of Skin/Hide

Conclusion

To conclude the session, review the tools, techniques and material used for segregating various skin/hide types. Give learners the opportunity to ask questions.

Assessment

Question and answer, discussion groups with feedback, observation of practice skills development

Total time: 20 hrs

Modules and Learning Units

Course: Leather Products Development Technician Level 2 (Stitcher)

Total Course Duration: 8.5 months

Course Overview:

The purpose of the Leather Products Development Technician Level 2 (Stitcher) course is to engage young people with a programme of development that will provide them with the knowledge, skills and understanding to start this career in Pakistan. The course has been developed to address specific issues, such as the work force availability within the country, and meeting and exceeding the needs and expectations of leather products industry.

Module	Learning Unit	Duration
Module 1: Demonstrate	LU1: Work in Team	90 Hours
Communication Skills	LU2: Prepare Reports	
	LU3: Prepare reports using computers	
	LU4: Deal with clients	
Module 2: Maintain safe work	LU1: Identify hazards at workplace	60 Hours
environment	LU2: Observe occupational safety and health (OSH)	
Module 3: Perform Cutting	LU1: Segregate various skin/hide types	60 Hours
Operations	LU2: Trace cutting pattern on leather skin/hide	
	LU3: Cut and bundle the panels	
Module 4: Prepare small parts of	LU1: Prepare machine according to stitching requirements	160 Hours
leather product	LU2: Stitch small parts of leather garment	
	LU3: Prepare small parts of gloves	
	LU4: Perform finishing operations on stitched small parts	

Module	Learning Unit	Duration
Module 5: Stitch leather garments	LU1: Prepare the work station	160 Hours
and accessories	LU2: Trace ready shape pattern of garments components	
	LU3: Fold different panels of leather garment	
	LU4: Prepare front panel	
	LU5: Prepare back panel	
	LU6: Prepare sleeves	
	LU7: Prepare lining	
	LU8: Assemble garment	
	LU9: Perform finishing operations on stitched components and garment	
Module 6: Stitch leather gloves	LU1: Prepare the workstation	160 Hours
	LU2: Prepare back and front panels of glove	
	LU3: Prepare the lining of glove	
	LU4: Assemble glove	
	LU5: Perform finishing operations on stitched gloves	
Module 7: Perform finishing	LU1: Inspect the stitched product	60 Hours
operations on leather products	LU2: Perform measurement control	
	LU3: Perform surface finishing operations	
	LU4: Pack the final product	



Module-1
TRAINER GUIDE

Teaching & Learning Activities

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
LU1: Work in Team	Deliver an illustrated presentation on communication skills. Ensure you address the importance of the following points: • Basic communication skills; constituents of communication process • Common and effective communication medium & there importance • Integrity and respect at workplace Assign minimum 2 phrases and expressions to each learner. The learners communicate the phrases or expressions using appropriate communication medium while other learners discuss if the phrase was communicated properly, and how it could be improved. Provide feedback to learners and lead into the discussion of importance of using body and sign language. Show videos on communication process and teamwork and discuss the message in the videos. For example, short videos of famous characters Mr. Bean and Charlie Chaplin show excellent demonstration of using body language for communication. Arrange learners in groups and give them VERBAL instructions to perform a task in the classroom; make sure the task can be performed with material and items available within the classroom in short time. DO NOT REPEAT the instructions. Make sure to include time pressure and embed competition. An example is presented below:		Case studies on teamwork and conflict resolution Videos on communication process and teamwork

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	Instructions: "You have 10 minutes to develop a real product or service to be sold in a mini market to two customers in this room. This is a REAL SALE. The market will open only for 3 minutes." Proceedings: The learners usually rush into the product or service development and tend to miss out on minor details like "Two Customers" and don't ask who the customers are and what their requirements are. At the time when market opens, the two customers visit each group with a very specific need for a product or service which few groups are able		
	to fulfil. Results: Reflect on the process and repeat the instructions. Ask which part of instructions was not followed or what was missed. Lead the discussion into importance of listening, processing and following instruction.		
	Move on to a discussion about the importance of working in teams and maintaining one's role in the team. Ensure the discussion considers:		
	Basic principles of team & task managementTechniques of conflict resolution		
	Introduce the topics by explaining that many businesses have teams to carry out complex operations. Have the learners read a case study on teamwork with some conflicts presented. Have them work in teams to resolve the issues presented in the case study.		

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	After the discussion, have the learners present their findings and solutions on flip charts. Ensure each team member takes part in the presentation. Stimulate a discussion on presented findings and solutions by each group and provide feedback to learners on their solutions and communication skills.		
	During the activities, learners must be able to demonstrate their knowledge and skills relating to communication, team work and conflict resolution. Ensure that learners have the opportunity to ask questions to support their understanding.		
LU2: Prepare Reports	Deliver an illustrated presentation on importance of report writing and constituents of a work completion report. Ensure their presentation addresses the following important points:		Different report formats used in leather products industries in Pakistan Passages/Cases presenting
	 Different media of reporting including verbal, written, demonstration etc. Importance of correct reporting Commonly used report formats and reporting hierarchy in leather goods industries 		completed work for group discussion
	Learners read a passage in groups, presenting a work completed; prepare a simple template, record the results on the template and present their reports. Facilitate discussion and provide feedback on the reports and proposed templates.		
	Combine this learning unit with one of the technical modules of stitching leather products. Learners prepare their production and/or quality reports on work completion. Provide constructive feedback on submitted reports in a discussion in classroom while		

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	keeping the names of report makers anonymous.		
	Learners must be able to demonstrate their knowledge and skills relating to the preparing basic work completion reports in leather products making process. Ensure that learners have the opportunity to ask questions to support their understanding.		
LU3: Prepare Reports using computer	Display basic components of a computer system and explain their functions. Setup a quiz to ensure learners properly identify the components and understand their basic functions. Learners may have a variety of prior experience. Encourage them to look at each other's documents and share ideas. Encourage more experienced learners to assist others who are new to Office. Give learners a tour of Microsoft Office, common Office applications, and working with Files and Folders. Let learners practice creating folders and office files on their individual computer workstations. Present important, common features of office applications, including the ribbon, shortcuts, dialog boxes, and shortcuts along with navigating, getting help, and printing. Let learners browse through the toolbars on their individual computer workstations and ask learners randomly to identify various features. Guide the learners during practice session to ensure thorough understanding. Word Processor Dive into the individual office applications by starting	Classroom / Computer Laboratory equipped with Computer system, Office software and internet connection	Sample documents and spreadsheets Instructions / data for making Word document, spreadsheets etc. Example of good and bad emails

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	students to practice on their computers, important word functions of Setting Page Layout, Typing Text, Character Formatting, Font, Font Style & Font Effect, Using short cut keys for Bold and Italics, Line and Paragraph Spacing, Working with Tables, Textboxes, Headers, Footers, and Page Numbers etc. Give individual assignments to generate a word document.		
	Excel		
	Explain commonalities between Word and Excel toolbars. Demonstrate, and encourage students to practice on their computers, important excel functions of Setting Print Layout, Making and Formatting Tables, Typing Text and Data in cells, Conducting Basic Mathematical Calculations etc. Give individual assignments to generate an excel spreadsheet.		
	E-mail		
	Explain purpose and benefits of using emails and guide students in making their personal email addresses. Conduct a group discussion on ethics of writing emails by displaying examples of good and bad emails. Explain layout and functions of major tools of email client (web based); demonstrate, and encourage students to practice on their computers, important functions of Setting Email Layout, Entering email addresses (To, Cc, Bcc functions), Typing text and Working with Tables, Insert Attachments, Send/Save/Draft functions etc. Learners send their Word and Excel assignments to the trainer via email.		
	Wrap-up		
	Verbally as a class (encouraging learners to speak out		

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	loud) describe the steps to create documents, spreadsheets and emails; encourage volunteers to write the steps on the board.		
	Learners reflect on what they have learned.		
	Review each student's assignment individually to ensure that they have a clear understanding of how to operate Office and provide constructive feedback.		
	Learners must be able to demonstrate their knowledge and skills relating to preparing reports using computer. Ensure that learners have the opportunity to ask questions to support their understanding.		
LU4: Deal with Clients	Lead a brainstorming session on client orientation. Use example from common life e.g. General Store, Milk Man, Home Appliance Repair, Internet etc. and ask learners what they expect from their service provider. Consolidate the discussion by mutually agreeing on traits of a good service provider or product supplier. Facilitate learners in applying the learning on leather goods sales process. Emphasize on importance of timely delivery of goods and services. Divide learners into groups and assign them different	with Flip charts and markers for group discussion; various stationery items including cards, masking tape, flip charts, markers etc. for preparing shops in roleplay	Posters on 4 Ps of marketing Assembled and unassembled leather gloves and garments Template for cost calculation
	products to sell in a mock market arrangement. Learners shall develop their sales points in different areas of the classroom. Make one group of learners to play role of buyers with clear instructions. At the end of the role play, jointly reflect on the whole process and facilitate learners to draw abstract concepts of the Marketing process, 4 Ps of marketing, Understanding	Visit to a leather products factory	

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	the client etc. Consolidate the discussion using a poster presentation on 4Ps of marketing.		
	Deliver an illustrative presentation on processes used for making leather garments and gloves. Show components of leather garments and gloves and explain steps required to assemble and finish the products. Learners visit a stitching workshop or factory, observe the whole process in small groups and take notes of the process steps. Back in the classroom, groups make presentations on flip charts and present the observed process in an information market arrangement; fellow learners share their additional observations. Provide constructive feedback on group work, present the actual process flow and encourage active questioning.		
	Present techniques of calculating cost of making a basic garment or glove including prevailing cost of material, labour, utilities, finishing, overheads and taxes. Provide and explain a cost calculation template and assign learners to calculate cost of a leather product using data provided in a case study. Explain importance of completing and delivering work on-time and give practical examples of losses due to late delivery of goods.		
	Once cost calculation is understood; involve two learners in a role play, performing as a buyer and a leather products maker. Actors negotiate the cost and delivery timelines and try to reach an agreement. Layout clear instructions for the buyer and leather		

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	products maker to ensure transmission of the underlying message. Facilitate a group discussion on the negotiation process and help learners understand negotiation techniques. Follow the discussion with a presentation on effective negotiation practices and techniques.		
	Learners must be able to demonstrate their knowledge and skills relating to dealing with clients in a realistic environment. Ensure that learners have the opportunity to ask questions to support their		



Module-2 TRAINER GUIDE

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
LU1: Identify Hazards at Workplace	Give an illustrated presentation on defining and identifying hazards. Use pictures and videos of hazards in leather cutting, stitching and finishing processes. Ensure you focus on following key points; • Introduction to types of hazards (Chemical, Mechanical, Electrical, Environmental etc.) at leather factories • Understanding of hazards in material handling & placement - emphasise on safe methods of handling heavy loads • Understanding of Health and safety signs and symbols • Understanding of Basic Techniques and methods to identify the risks of hazards at workplace Show learners a video or illustrations of hazards at a workplace and ask them to identify the hazards (a nice series of such videos is available at https://www.napofilm.net/en). Involve all learners into the discussion to complete the list of hazards in the video or illustration. To add excitement, you may choose to make groups of learners and incite a competition of hazard identification. Explain contents of a hazard identification sheet or a basic hazard report to learners. Take learners to a factory or a workshop of leather products making including cutting, stitching and finishing processes and assign learners to list down hazards and their possible affects. Let the learners present their findings in groups in the classroom and consolidate the findings	Real or realistic leather products making environment	Videos and illustrations on hazards at workplaces. Specific pictures and videos of leather making process for hazard identification. Labels and signs used for identification of electrical, mechanical, Chemical and environmental hazards. Format of hazard identification sheet

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	for collective learning. Invoke learners to bring up ideas of avoiding risks posed by the identified hazards.		
	Explain the reporting hierarchy in the leather factories and guide learners about their role as cutting, stitching or finishing worker in hazard and incident handling and reporting in organizations.		
	Learners must be able to demonstrate their knowledge and skills relating to identifying hazards in practical environment. Ensure that learners have the opportunity to ask questions to support their understanding.		
LU2: Observe Occupational Safety and Health (OSH)	Deliver an illustrated presentation on importance of using personal protective equipment (PPE) and their uses. Explain health and safety precautions required for leather products making. Take a quiz on identification of PPEs. Ensure focus on following key elements	Classroom Real or realistic leather products making environment	Assorted range of Persona Protective Equipment Videos on correct usage of PPEs Videos and illustrations on 5S
	Demonstrate correct usage of personal protective equipment. Invite learners to wear the PPEs and ask fellows for feedback if they method were correct or not.		
	Organize an activity or game in classroom to teach workplace organization to learners. An example activity is presented below;		
	Arrange two worktables with 15 unassembled ball- point pens (5 Red, 5 Blue, 5 Black) on each table. Place all unassembled parts mixed in one bin on each table.		

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
_	Invite two volunteers and set a challenge to assemble the ball point pens. Both learners will find it quite challenging to complete the tasks quickly due to mixed colours and unorganized placement. On completion of first round, ask both participants about their views on the assembly process and seek ideas from both as well as whole class on reducing time for the assembly. In 2 nd round; place all components separated with colour and type in separate bins and task the participants to assemble the pens again. This time both participants shall be able to do it more quickly and with ease. Discuss the experience again with the class and emphasize on importance of organizing the workplace properly. Relate to the learnings of the preceding activity/game and lead the discussion into the concept of Japanese 5S through an illustrative presentation. Seri (Sort) Seiso (Set in order)		
	Seiketsu (Standardize)Shitsuke (Sustain; make it a habit)		
	Learners must be able to demonstrate their knowledge and skills relating to observe occupational safety and health in practical environment. Ensure that learners have the opportunity to ask questions to support their understanding.		



Module-3
TRAINER GUIDE

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
LU1: Segregate various skin/hide types	Begin this session with an illustrated presentation on types of materials used in the manufacturing of leather goods. Help learners understand the difference between leather and synthetic materials. Show leather and synthetic material samples and explain methods of identifying the material types. Explain nomenclature used in leather material e.g. Skin, hide etc. Explain various leather skin/hide quality parameters (shade, grain, split, colour matching stretch-ability, hardness, softness, thickness etc.) through practical demonstration and let the students practice differenciating skins/hides based on shades, hardness, softness, and other parameters. Show various defects in skin/hide (butcher cuts, warble fly, tick marks etc.) to learners and explain their consequences. Assign learners to individually identify, note and present defects on a provided skin/hide. Invoke fellow learners to provide their feedback to each presentation. Provide constructive feedback to the learners. Explain Leather measurement techniques and demonstrate using Gauge meter and other measuring tools. Assign learners to take and record measurements of provided skin/hide individually. Provide constructive feedback and ensure proper understanding. Give an illustrated presentation on various parts of Skin/Hide and show examples of products or parts of a leather product prepared from various Skin/hide parts. Take a quiz of learners on identification of	Real or realistic Cutting environment	Samples of leather skin and hide Swatches of different articles like Nubuck, Suede, aniline, t-burnish Split, glaze etc. Swatches of synthetic material (Rexene) like PU, PVC, TPR coating, Ammara, Leather gauge meter and other measuring tools Inspection Table with proper light

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	skin/hide parts using real skin/hide.		
	Learners must be able to demonstrate their knowledge and skills relating to segregating various leather materials. Ensure that learners have the opportunity to ask questions to support their understanding.		
LU2: Trace cutting	Explain line of tightness and stretch-ability of leather		Leather skins/hides
pattern on leather skin/hide	skin/hide/synthetic and assign the learners to individually identify these parameters on real skin/hide	Real or realistic	Synthetic material
okiii/indo	or synthetic material. Demonstrate aligning skin/hide	Cutting environment equipped with cutting	Illustrations / pictures of leather products and their parts
	for cutting according to the Line of Tightness and Line of Stretch-ability and let learners practice in a	table, matching	Samples of leather products and
	controlled environment. Provide constructive feedback	Cialion	their cut panels
	to each learner and ensure proper understanding.		Cutting patterns for different products
	Give an illustrated presentation on various parts of Skin/Hide and show examples of products or parts of		Tracing tools
	a leather product prepared from various Skin/hide parts. Take a quiz of learners on identification of skin/hide parts using real skin/hide.		Paper sheets to practice tracing
	Present various product components & their panels using illustrations, pictures and real products.		
	Explain nesting/manipulation efficiency in cutting and basic techniques of controlling cutting wastage. Make sure to give basic know-how of matching of leather components to help learners familiarize with skin/hide cutting layout.		
	Give basic understanding of pattern and types of patterns. Facilitate learners to identify different parts of		

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	patterns of various products		
	Demonstrate usage of tracing tools and explain their application on different types of materials.		
	Let learners practice pattern tracing, cutting and matching on paper sheets of various textures like Plain, striped (even & uneven), plaid (even & uneven) before shifting to leather or synthetic material. This helps in reducing material wastage during the training.		
	Hold practical sessions on tracing cutting patterns on leather skin/hide and ensure that learners are able to demonstrate their knowledge and skills relating to tracing.		
	Hold feedback session and ensure that learners have the opportunity practice multiple times and encourage them to ask questions to support their understanding.		
LU3: Cut and bundle the panels	Give an illustrated presentation on cutting techniques and methods prevailing in the industry. Make sure to include; • Single or multi-layer cutting • Different Reinforcement Materials (fusing material/Cotton Tape etc.) and their usage in leather cutting process • Different types of cutting methods and tools (Direct Knife, Scissor, Electric Cutter, Press, Laser Cutting, etc.) • Quality criteria for cutting of leather and synthetic material	Classroom Real or realistic Cutting environment equipped with cutting table, matching station	Leather skins/hides Synthetic material Various types of leather cutting tools Samples of good and bad cut panels for demonstration Paper sheets to practice cutting Numbering Machine Cutting Table
	Explain the procedure of sizing & numbering/marking as per size/article/shade/operation to make the final		

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	bundle of cut panels and demonstrate bundling and numbering.		
	Demonstrate correct and safe usage of cutting tools to learners and organize multiple practice sessions in a controlled environment. In the beginning, use paper/board template of skin/hide and later shift to actual skin/hide once learners are able to handle the cutting tools properly. During practical cutting sessions on actual skin/hide, assign learners with individual tasks of cutting and bundling; and give constructive feedback, guidance and tips to improve their skills.		
	After the practical sessions are complete, lead a feedback session. Ask learners to complete a self-assessment form on their ability to perform cutting operations. Ask questions to confirm their understanding. Provide opportunities for trainees to ask their own questions. Encourage peer discussions.		Learner guide Learner self-assessment forms



Module-4
TRAINER GUIDE

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
LU1: Prepare machine according to stitching requirements	This learning unit is the base for stitching, thus proper time must be allocated to this unit. Help learners recall the concepts of workplace organization and 5S taught in the Module-2 in a moderated discussion. Emphasize on cleaning requirements of the stitching workstation in specific and workplace in general and explain the impact of cleanliness on machine life and product quality. Show different types of sewing machines used in stitching leather garments and gloves, and explain their purposes by showing different types of seams and stitches made by these machines. Take quiz of learners to identify different machines and match the stitches with relevant machines. Give an illustrated presentation on various components of stitching machines and differences among various machine types. Describe purpose and functions of machine components. Take the learners to the workshop or laboratory and show assembled and unassembled stitching machines. Help learners identify the machine components and randomly ask purpose and functions of the components. Once all components are memorised, arrange the classroom in a marathon arrangement i.e. place different machine types on different tables. Make groups of learners and assign them to identify components of all machines turn by turn; prepare a questionnaire with pictures of the machine components; 1 set for each group. Add time pressure by announcing time limit for each machine. Once the time is over for a machine, all	Classroom Real or realistic Stitching environment	Various types of Stitching Machines with complete accessories like folder, Stitch Gauge; • Single Needle Flatbed & Double Needle) • Post Bed (Single & Double Needle) • Overlock Machine • Button Attach Machine • Button Stitch Machine • Button Hole Machine • Flat Lock (Three Needle Machine) • Bar tack Machine • Cylinder Arm Stitching Machine • Zig Zag Stitching Machine Unassembled machine components Basic maintenance toolkit including Clipper, Scissor, Hammer, Oil Can, Screw Driver Set & Allen Key Set Learners guide for Module-1 and

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	groups must leave their tables and move to their next		Module-2
	assigned machines. Check work of all groups and provide constructive feedback. The group completing the task first and identifying most components		Questionnaires with pictures of machine components
	correctly wins. Appreciate the winners as well as other		Samples of various seam types
	participants and correct the mistakes jointly in a discussion.		Different types of threads
	Once learners are able to identify the machine components correctly, demonstrate machine cleaning,		Different types of needles and needle attachments
	and oiling and let learners practice the same. Demonstrate basic maintenance of machine like changing broken needle, rectifying broken thread, ensuring smooth movement of parts etc. Hold practice		Technical files, sketches and samples of various leather products
	sessions of machine cleaning and basic maintenance in a controlled environment.		Various attachments or leather garments and gloves
	Demonstrate and let learners practice setting thread, bobbin winding, needle attachment, and adjustment of bobbin & bobbin case on different machine types and for different types of seams in a controlled environnment. Ensure learners have thorough understanding of following;		
	various types of needles and their usageKnow-how about various types of threads		
	Thoroughly explain method of reading technical files, sketches and samples of products. Teach learners methods of identifying stitching requirements like thread type, seam type, machine type etc. from the technical file, sketch and samples.		
	Refer to LU4 of Module-1 where learners learnt the process sequence for leather products manufacturing.		

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	Reiterate the process flow in a moderated discussion and help learners recall the process flow by asking guiding questions. Identify the gaps in understanding and help learners repeat the process flow if required. If learners find it difficult to recall, take them to a factory visit again and repeat the activity of Module-1-LU4.		
	Show various accessory attachments of leather garments and gloves and explain their purpose.		
	Describe stitching parameters like Stitch per Inch (SPI), Adjustment of pressure foot, thread tension etc. and explain their importance in quality of stitching. Show various seams and let learners measure/calculate the stitches per inch.		
	Hold practice sessions where learners prepare the workplace for the work operation in a controlled environment. Make sure you emphasize on observing occupational safety and health (OSH) during all activities. Learners must be able to demonstrate their knowledge and skills relating to preparing machine according to stitching requirements. Ensure that learners have the opportunity to ask questions to support their understanding.		
LU2: Stitch small par of leather garment	Give an illustrated presentation on various small parts of leather garments like pockets, belts, collar, cuff, zip etc. Assign learners to label different types of leather garments like jacket, pants, shirt, skirt, blouse etc. Hold a quiz to assess understanding level. Describe contents of the Job Card and work reports; show different templates of job cards and work reports	Classroom Real or realistic stitching environment	Learners guides for previous modules Samples of different types of assembled and unassembled leather garments Cut panels of small parts of

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	prevailing in the leather industry and explain filling the		leather garments
	job card. Assign learners to fill job cards and work reports of all following performances.		Samples of job cards and work reports
	Explain skiving and its purpose. Explain marking		Skiving machine
	requirements and technique for skiving, folding and stitching. Explain importance and purpose of seam		Marble Slab
	allowance. Demonstrate using skiving tools and		Iron
	equipment and let learners practice marking and		Iron stand
	skiving individually in a controlled environment. Check work of all learners, provide constructive feedback and		Brush to apply adhesive
	help them correct their mistakes.		Adhesive
	Explain folding requirements and methods.		Pressing hammer
	Demonstrate application of different types of adhesives and correct usage of folding tools like		Various types of Stitching Machines with complete
	hammer or folding machine. Let learners individually practice folding on different product components.		accessories like folder, Stitch Gauge, Machine Light/Needle
	Check work of all learners, provide constructive		Light;
	feedback and help them correct their mistakes		Single Needle Flatbed
	Recap following learning elements (which were		Double Needle)
	already learnt during previous modules) in a moderated group discussion and repeat the elements		 Post Bed (Single & Doub Needle)
	which learners are unable to fully recall;		 Overlock Machine
	Fusing materials and their applicationsCommonly used measuring systems		Button Attach Machine
	Various panels of leather products and their shapes		Button Stitch MachineButton Hole
	Understand usage of Stitch Gauge		 Cylinder arm machine
	 Know different stitch types and their uses 		 Flat Lock (Three Need
	Understand various stitching parameters		Machine)
	including thread tension, SPI, foot pressure		 Bar tack Machine

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	etc.		Zig Zag machine
	Demonstrate tools and equipment used to apply fusing and hold practice sessions of applying fusing on specified areas of the panel in a controlled environment. Explain purpose of different types of seams like piping, inseam, top seam, double top seam, lapped seam etc. Demonstrate stitching different seam types on different types of machines. This is the most important aspect of stitching and thus must be allocated ample time for each learner to practice stitching. Hold multiple practice sessions of stitching different seam types on different types of machines. Assign learners to practice different types of seams as printed on the paper work sheets. Let them practice on leather only when they demonstrate adequate skills on paper worksheets. Make sure learners fully understand quality requirements of stitching process using product specification charts, technical sheets, sketches, samples etc. and are able to control the stitched small parts of leather garment according to the quality requirements. Ensure learners are able to perform following tasks; • Bundle stitched components according to sizes / number marking • Prepare and submit production report on prescribed format Explain and demonstrate ironing on leather garments. Hold practice sessions on ironing. Once learners are proficient in stitching small parts of		Paper, fabric and leather sheets for practice sessions Technical files, sketches and samples of various leather products. Assessment guide

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	leather garments, hold a practical assessment using the assessment guide. Identify learners with lower level of skills and knowledge and hold additional lectures and practice sessions. Encourage more skilled learners to help other fellows to ensure collective learning and positive working environment. Make sure you emphasize on observing occupational safety and health (OSH) during all activities. Learners must be able to demonstrate their knowledge and skills relating to stitching small parts of leather garments. Ensure that learners have the opportunity to ask questions to support their understanding.		
LU3: Prepare small parts of gloves	Give an illustrated presentation on various small parts of leather gloves like thumb, cuff, fourchette etc. Assign learners to label different types of leather gloves. Hold a quiz to assess understanding level. Recap different panels of leather gloves; explain shape difference among various types of gloves. Explain fusing, its purpose and application techniques. Hold practice sessions of applying fusing on glove parts. Explain stitching requirements of different glove parts including thumb, cuff, fourchette etc. Demonstrate stitching of small parts of gloves. Learners apply their knowledge and skills of stitching; as acquired in LU2 of this module; and prepare Thumb, Cuff and Fourchette of different types of leather gloves in multiple practice sessions using different types of stitching machines.	Classroom Real or realistic Stitching environment	Learners guides for previous modules Samples of job cards and work reports for glove making Samples of different types of assembled and unassembled leather gloves Cut panels of small parts of leather gloves Binding Machine Various types of Stitching Machines with complete accessories like folder, Stitch Gauge, Machine Light/Needle Light; • Zigzag Machine • Double Needle Lock Stitch

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	requirements of leather gloves using product specification charts, technical sheets, sketches, samples etc.		Machine Over Lock Machine
	Once learners are proficient in stitching small parts of leather gloves, hold a practical assessment using the assessment guide. Identify learners with lower level of skills and knowledge and hold additional lectures and practice sessions. Encourage more skilled learners to help other fellows to ensure collective learning and positive working environment.		Technical files, sketches and samples of various leather products. Leather / Synthetic Material Assessment guide
	Learners prepare job cards and work reports of stitching small parts of leather gloves.		
	Make sure you emphasize on observing occupational safety and health (OSH) during all activities. Learners must be able to demonstrate their knowledge and skills relating to stitching small parts of leather gloves. Ensure that learners have the opportunity to ask questions to support their understanding.		
LU4: Perform finishing operations on stitched small parts	Explain finishing requirements of small parts of leather products including trimming and cleaning and assign learners to perform finishing operations on the components they stitched in LU2 and LU3 of this module. Make sure you include following in the session; • Trim extra threads and flash material from stitched components • Clean tracing lines from stitched components • Clean the stitched component for dust, oil and adhesive marks	Classroom Real or realistic Stitching environment	Samples of leather garments, gloves and their parts Quality check lists of various leather products Quality report template Trimming tools e.g. Clipper, Scissors etc. Measuring tape Cleaning brush, cotton and cloth Cleaning agent

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	 Check the ready sewn products according to the product design and quality requirements 		
	Give an illustrated presentation on quality requirements of leather garments and gloves. Specifically explain quality requirements of small parts and their importance in overall quality of the products.		
	Explain method of checking product quality using a checklist or product sample. Show different garments and gloves, and let learners identify quality issues in the products. Explain purpose and template of a quality report. Hold practice sessions where learners check quality of different products and prepare a quality report.		
	Recap workplace organization and good housekeeping concepts from previous modules. Explain concept of Japanese 5S through an illustrative presentation and a group activity.		
	 Seri (Sort) Seiso (Set in order) Seiton (Cleanliness; Shine) Seiketsu (Standardize) Shitsuke (Sustain; make it a habit) 		
	Assign learners to perform housekeeping of their workstations after completing stitching and finishing operations.		
	Make sure you emphasize on observing occupational safety and health (OSH) during all activities. Learners must be able to demonstrate their knowledge and skills relating to performing finishing operations on small parts of leather products. Ensure that learners		

Module 4: Prepare Small Parts of Leather Products			
Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	have the opportunity to ask questions to support their understanding.		

LEATHER PRODUCTS DEVELOPMENT TECHNICIAN



Module-5 TRAINER GUIDE

Version 1 - October, 2019

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
LU1: Prepare the workstation	Trainees need to practice their skills in using methods and equipment to prepare the workstation for stitching, in a real or realistic environment. Assess the gaps in learners' knowledge and skills; hold additional sessions to recap the concepts learnt in Module-4 to ensure all learners have thorough understanding of the tasks at hand. After the practical sessions are complete, lead a feedback session. Ask learners to complete a self-assessment form on their ability to prepare workstation for stitching. Ask questions to confirm their understanding. Provide opportunities for trainees to ask their own questions.	Classroom Real or realistic Stitching environment	Various types of Stitching Machines with complete accessories like folder, Stitch Gauge; Single Needle Flatbed & Double Needle) Post Bed (Single & Double Needle) Overlock Machine Button Attach Machine Button Stitch Machine Button Hole Cylinder Arm stitching machine Flat Lock (Three Needle Machine) Bar tack Machine Zig Zag machine Basic maintenance toolkir including Clipper, Scissor, Hammer, Oil Can, Screw Driver Set & Allen Key Set Technical files, sketches and samples of various leather products Various attachments of leather

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
			garments
			Learners guide for Module-1. Module-2 and Module-4
			Self-assessment questionnaire
LU2: Trace ready-	Trainees need to practice their skills in using methods	Classroom	Ready-shape Pattern
shape pattern of	and equipment to trace patterns for stitching, in a real	1 todi di Todilotio	Tracing Table with Lights
garment components	or realistic environment. Assess the gaps in learners' knowledge and skills; hold additional sessions to recap the concepts learnt in Module-3 to ensure all learners have thorough understanding of the tasks at hand; especially following; • Line of tightness and stretch-ability of leather skin/hide and synthetic • Panels of various types of leather garments and products • Process sequence for leather products manufacturing • Seam allowances used for different types of material and stitches • Component placement with the help of tracing pattern • Marker making • Nesting/manipulation efficiency and know techniques of controlling cutting wastage Demonstrate matching of leather components as per	stitching environment	Leather skin/Hide / Synthetic material Cut panels of garment components Technical file, sketch, instructions, and samples of various leather products Learners guide for Module-3

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	matching.		
	Hold practice sessions of tracing ready-shape pattern of garment components in a controlled environment including following;		
	 Place ready-shape pattern on the already cut panel according to seam allowance required for the component Trace pattern on the panel (for leather, adhesive and lining) Bundle the panels according to size (for leather, adhesive and lining) Make sure you emphasize on observing occupational 		
	safety and health (OSH) during all activities. After the practical sessions are complete, lead a feedback session. Ask learners to complete a self-assessment on their ability to trace ready-shape pattern for garment components. Ask questions to confirm their understanding. Provide opportunities for trainees to ask their own questions.		
LU3: Fold different panels of leather garment	Trainees need to practice their skills in using methods and equipment to perform folding, in a real or realistic environment. Ensure to include following in the session; • Apply fusing on specified areas of the panel	Classroom Real or realistic Stitching environment	Hammers (Wooden, Plastic, Rubber and Iron) Reinforcement Material(Double Tape, Fusing,)
	 Apply idshift on specified areas of the parter Apply adhesive to the designated area of panel in appropriate quantity Fold panel as per tracing according to adhesive specifications Press the folded area with a hammer 		Brush to apply adhesive Rubber sheet and Rexene sheet Marble Slab Binding Machine

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	homogeneously		Skiving machine, skiver
	Assess the gaps in learners' knowledge and skills; hold additional sessions to recap the concepts learnt in Module-4 to ensure all learners have thorough understanding of the tasks at hand; especially following;		Scissor, Clipper
	 Skiving methods and requirements for different materials Use of adhesives according to various materials 		
	 Reinforcement materials and their applications Make sure you emphasize on observing occupational safety and health (OSH) during all activities. After the practical sessions are complete, lead a feedback session. Ask learners to complete a self-assessment on their ability to fold different panels of leather garments. Ask questions to confirm their understanding. Provide opportunities for trainees to ask their own questions. 		
LU4: Prepare Front panel	Give an illustrated presentation on construction of front panel, various components and attachments, and types of seams used on front panel. Show samples of stitched and unstitched front panel and demonstrate preparation of front panel. Trainees need to practice their skills in using methods and equipment to perform stitching, in a real or realistic environment. Ensure following are included; • Stitch the front panel as per sample or instructions	Classroom Real or realistic Stitching environment	Learners guide for Module-4 Samples of assembled and unassembled front panels of leather garments Various types of Stitching Machines with complete accessories like folder, Stitch Gauge, Machine Light/Needle Light;

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	 Stitch related small parts with front panel on specific traced area Control the result of the sewing process according to quality standards and the sewing instruction Bundle prepared front panels according to sizes / number marking Assess the gaps in learners' knowledge and skills; hold additional sessions to recap the concepts learnt in Module-4 to ensure all learners have thorough understanding of the tasks at hand. Once learners are proficient in stitching front panels of leather garments, hold a practical assessment using the assessment guide. Identify learners with lower level of skills and knowledge and hold additional lectures and practice sessions. Encourage more skilled learners to help other fellows to ensure collective learning and positive working environment. Make sure you emphasize on observing occupational safety and health (OSH) during all activities. Learners must be able to demonstrate their knowledge and skills relating to preparing front panels of leather garments. Ensure that learners have the opportunity to ask questions to support their understanding. 		Double Needle) Post Bed (Single & Double Needle) Overlock Machine Button Attach Machine Button Stitch Machine Button Hole Flat Lock (Three Needle Machine) Eyelet machine Bar tack Machine Zig Zag machine Cuttings of front panel Technical files, sketches and samples of various leather products. Assessment guide
LU5: Prepare Back panel	Give an illustrated presentation on layout of back panel, various components and attachments (Belt, plates, foam padding, straps, and air vents etc.), and types of seams used on back panel. Show samples of stitched and unstitched back panel and demonstrate preparation of back panel.	Classroom Real or realistic Stitching environment	Learners guide for Module-4 Samples of assembled an unassembled back panels of leather garments Various types of Stitchin

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	Trainees need to practice their skills in using methods and equipment to perform stitching, in a real or realistic environment. Ensure following are included; • Stitch the back panel as per sample or instructions • Stitch related small parts with back panel on specific traced area • Control the result of the sewing process according to quality standards and the sewing instruction • Bundle prepared back panels according to sizes / number marking Once learners are proficient in stitching back panels of leather garments, hold a practical assessment using the assessment guide. Identify learners with lower level of skills and knowledge and hold additional lectures and practice sessions. Encourage more skilled learners to help other fellows to ensure collective learning and positive working environment. Make sure you emphasize on observing occupational safety and health (OSH) during all activities. Learners must be able to demonstrate their knowledge and skills relating to preparing back panels of leather garments. Ensure that learners have the opportunity to ask questions to support their understanding.		Machines with complete accessories like folder, Stitch Gauge, Machine Light/Needle Light; • Single Needle Flatbed & Double Needle) • Post Bed (Single & Double Needle) • Overlock Machine • Button Attach Machine • Button Stitch Machine • Button Hole • Flat Lock (Three Needle Machine) • Eyelet machine • Bar tack Machine • Zig Zag machine Cuttings of back panel Technical files, sketches and samples of various leather products. Assessment guide
LU6: Prepare sleeves	Give an illustrated presentation on construction of sleeves including; • Flap Pocket, Zip Pocket, Logo Embroidery	Classroom Real or realistic Stitching environment	Learners guide for Module-4 Samples of assembled and unassembled sleeves of leather

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	etc. Identification of upper and under sleeve Armhole and sleeve length accurately High point shoulder (Centre Point) of sleeve Centre back neck length of sleeve Different types of Cuff and their application Show samples of stitched and unstitched sleeves and demonstrate preparation of sleeves. Trainees need to practice their skills in using methods and equipment to perform stitching, in a real or realistic environment. Ensure following are included; Stitch related small parts with sleeves on specific traced area Stitch the sleeve as per product requirement Control the result of the sewing process according to quality standards and the sewing instruction Bundle prepared sleeves according to sizes / number marking Once learners are proficient in stitching sleeves of leather garments, hold a practical assessment using the assessment guide. Identify learners with lower level of skills and knowledge and hold additional lectures and practice sessions. Encourage more skilled learners to help other fellows to ensure collective learning and positive working environment. Make sure you emphasize on observing occupational safety and health (OSH) during all activities. Learners must be able to demonstrate their knowledge and skills relating to preparing sleeves of leather		garments Various types of Stitching Machines with complete accessories like folder, Stitch Gauge, Machine Light/Needle Light; • Single Needle Flatbed & Double Needle) • Post Bed (Single & Double Needle) • Overlock Machine • Button Attach Machine • Button Stitch Machine • Button Hole • Flat Lock (Three Needle Machine) • Eyelet machine • Bar tack Machine • Zig Zag machine Cut panels of sleeves Technical files, sketches and samples of various leather products. Assessment guide

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	garments. Ensure that learners have the opportunity to ask questions to support their understanding.		
LU7: Prepare lining	Give an illustrated presentation on purpose of lining and its uses in the different kinds of garment like in Sports, Fashion, Protective, motorbike apparel etc. Show different types of fabric used in the lining materials like fleece, polyester, thinsulate, wool, nomex, cherry, satin, cotton etc. and explain their uses. Familiarize learners with panels of lining used in front, back and sleeve panels Explain construction of lining including placement of size/content label, customer logo, side logo Velcro, zip pocket, mobile pocket etc. Explain and demonstrate difference between stitching leather and fabric. Trainees need to practice their skills in using methods and equipment to perform stitching, in a real or realistic environment. Ensure following are included; Stitch the lining panel as per sample or instructions Stitch related small parts with lining panel on specific traced areas Control the result of the sewing process according to quality standards and the sewing instruction Attach required labels with lining at specific place	Classroom Real or realistic Stitching environment	Learners guide for Module-4 Samples of assembled and unassembled linings of leather garments Various types of Stitching Machines with complete accessories like folder, Stitch Gauge, Machine Light/Needle Light; • Single Needle Flatbed & Double Needle) • Post Bed (Single & Double Needle) • Overlock Machine • Button Attach Machine • Button Stitch Machine • Button Hole • Flat Lock (Three Needle Machine) • Eyelet machine • Bar tack Machine • Zig Zag machine Cut panels of lining Technical files, sketches and

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	Once learners are proficient in stitching lining of leather garments, hold a practical assessment using the assessment guide. Identify learners with lower level of skills and knowledge and hold additional lectures and practice sessions. Encourage more skilled learners to help other fellows to ensure collective learning and positive working environment. Make sure you emphasize on observing occupational safety and health (OSH) during all activities. Learners must be able to demonstrate their knowledge and skills relating to preparing lining of leather garments. Ensure that learners have the opportunity to ask questions to support their understanding.		samples of various leather products. Assessment guide
LU8: Assemble garment	Give an illustrated presentation on process sequence of final assembly of leather garments. Ensure learners of thorough understanding of methods and quality requirements of following; Side seam, shoulder seam and joining of collar Stitching different lining material in to the shell Joining sleeves with shell of the garment Piped seam Finalize garment by stitching zip, Velcro, Button, Button Hole and closing stitch Trainees need to practice their skills in using methods and equipment to perform stitching, in a real or realistic environment. Ensure following are included; Attach front and back panel as per sample or instructions 	Classroom Real or realistic Stitching environment	Learners guide for Module-4 Samples of assembled and unassembled leather garments Various types of Stitching Machines with complete accessories like folder, Stitch Gauge, Machine Light/Needle Light; • Single Needle Flatbed & Double Needle) • Post Bed (Single & Double Needle) • Overlock Machine • Button Attach Machine • Button Stitch Machine

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	 Attach collar/belt and/or other related small parts with the body on specific areas Attach lining with the shell on specific areas Attach accessories with the product according to design requirement Control the result of the sewing process according to quality standards and the sewing instruction Finalize the garment with closing stitches Once learners are proficient in assembling leather garments, hold a practical assessment using the assessment guide. Identify learners with lower level of skills and knowledge and hold additional lectures and practice sessions. Encourage more skilled learners to help other fellows to ensure collective learning and positive working environment. Make sure you emphasize on observing occupational safety and health (OSH) during all activities. Learners must be able to demonstrate their knowledge and skills relating to assembling leather garments. Ensure that learners have the opportunity to ask questions to support their understanding. 		Button Hole Flat Lock (Three Needle Machine) Eyelet machine Bar tack Machine Zig Zag machine Cut panels of Leather garments Technical files, sketches and samples of various leathe products. Assessment guide
LU9 : Perform finishing operations on stitched components and garment	Finishing requirements of leather garments including trimming and cleaning. Trainees need to practice their skills in using methods and equipment to perform finishing operations after stitching, in a real or realistic environment. Recall following concepts learnt in Module-2 and Module-4;	Classroom Real or realistic Stitching environment	Samples of leather garments Quality check lists of various leather garments Quality report template Trimming tools e.g. Clipper Scissors etc. Measuring tape

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	 Trim extra threads and flash material from stitched components Clean tracing lines from stitched components Clean the stitched component for dust, oil and adhesive marks Quality requirements of leather garments. Method of checking product quality using a checklist or product sample and preparing a quality check report. Workplace organization, 5S and good housekeeping. Preparing and submitting work completion report. Assign learners to perform housekeeping of their workstations after completing stitching and finishing operations. Make sure you emphasize on observing occupational safety and health (OSH) during all activities. Learners must be able to demonstrate their knowledge and skills relating to perform basic finishing on leather garments. Ensure that learners have the opportunity to ask questions to support their understanding. 		Cleaning brush, cotton and cloth Cleaning agent

LEATHER PRODUCTS DEVELOPMENT TECHNICIAN



Module-6
TRAINER GUIDE

Version 1 - October, 2019

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
LU1: Prepare the workstation	Trainees need to practice their skills in using methods and equipment to prepare the workstation for stitching, in a real or realistic environment. Assess the gaps in learners' knowledge and skills; hold additional sessions to recap the concepts learnt in Module-4 and Module-5 to ensure all learners have thorough understanding of the tasks at hand. After the practical sessions are complete, lead a feedback session. Ask learners to complete a self-assessment form on their ability to prepare workstation for stitching. Ask questions to confirm their understanding. Provide opportunities for trainees to ask their own questions.	Classroom Real or realistic Stitching environment	Various types of Stitching Machines with complete accessories like folder, Stitch Gauge; Single Needle Flatbed & Double Needle) Post Bed (Single & Double Needle) Overlock Machine Cylinder Arm Machine Bar tack Machine Jig Zag machine Basic maintenance toolkit including Clipper, Scissor, Hammer, Oil Can, Screw Driver Set & Allen Key Set Technical files, sketches and samples of various leather gloves Various attachments of leather gloves Learners guide for Module-4 Self-assessment questionnaire

Module 6: Stitch Lea	ther Gloves		
Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
LU2: Prepare front and back panels of Glove	Give an illustrated presentation on types of leather gloves, their uses and construction. Give an illustrated presentation on construction of front and back panels, various components and attachments, and types of seams used in both panels. Familiarize learners with various glove materials like thread types, zip, Velcro, logos, conductive fabric/thread, Leather, Protective components (knuckle, air vent, gels, foam padding) buttons and other attachments. Show and explain panels of glove components. Show samples of stitched and unstitched front and back panels and demonstrate their preparation. Ensure learners understand glove stitching parameters like Stitch Per Inch (SPI), measurements etc. Trainees need to practice their skills in using methods and equipment to perform stitching, in a real or realistic environment. Ensure following are included; • Attach small parts (Finger Tips, Logo, Reflective Piping, patches etc.) with Back and Front Panels at specified areas • Stitch Thumb with Front panel • Stitch Elastic on Back or Front panel of the gloves with appropriate machine • Stitch Fourchette with the Back or Front panel • Stitch Cuff / Velcro with the Back or Front panel	Classroom Real or realistic Stitching environment	Learners guide for Module-4 Samples of assembled and unassembled front and back panels of leather gloves Various types of Stitching Machines with complete accessories like folder, Stitch Gauge, Machine Light/Needle Light; • Single Needle Flatbed & Double Needle) • Post Bed (Single & Double Needle) • Overlock Machine • Cylinder Arm Machine • Bar tack Machine • Zig Zag machine Cuttings of front and back panels of gloves Technical files, sketches and samples of various leather gloves. Assessment guide

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	Control the result of the sewing process according to quality standards and the sewing instruction		
	Assess the gaps in learners' knowledge and skills; hold additional sessions to recap the concepts learnt in Module-4 to ensure all learners have thorough understanding of the tasks at hand.		
	Once learners are proficient in stitching front and back panels of leather gloves, hold a practical assessment using the assessment guide. Identify learners with lower level of skills and knowledge and hold additional lectures and practice sessions. Encourage more skilled learners to help other fellows to ensure collective learning and positive working environment.		
	Make sure you emphasize on observing occupational safety and health (OSH) during all activities. Learners must be able to demonstrate their knowledge and skills relating to preparing front and back panels of leather gloves. Ensure that learners have the opportunity to ask questions to support their understanding.		
LU3: Prepare lining ogloves	Give an illustrated presentation on purpose of lining and its uses in the different kinds of gloves like in sports, safety, fashion and protective gear. Show different types of fabric used in the lining materials like fleece, polyes, thinsulate, wool, nomex, Kevlar, hypora etc. and explain their uses. Familiarize learners with panels of lining used in front,	Classroom Real or realistic Stitching environment	Learners guide for Module-4 Samples of assembled and unassembled linings of leather gloves Various types of Stitching Machines with complete accessories like folder, Stitch

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	Explain construction of lining including placement of size/content label and logos etc. Trainees need to practice their skills in using methods and equipment to perform stitching, in a real or realistic environment. Once learners are proficient in stitching lining of leather garments, hold a practical assessment using the assessment guide. Identify learners with lower level of skills and knowledge and hold additional lectures and practice sessions. Encourage more skilled learners to help other fellows to ensure collective learning and positive working environment. Make sure you emphasize on observing occupational safety and health (OSH) during all activities. Learners must be able to demonstrate their knowledge and skills relating to preparing lining of leather gloves. Ensure that learners have the opportunity to ask questions to support their understanding.		Light; Single Needle Flatbed & Double Needle) Post Bed (Single & Double Needle) Overlock Machine Cylinder Arm Machine Bar tack Machine Zig Zag machine Cut panels of lining Technical files, sketches and samples of various leather gloves. Assessment guide
LU4: Assemble gloves	Give an illustrated presentation on process sequence of final assembly of leather gloves. Ensure learners of thorough understanding of methods and quality requirements of following; • Use of finger shape pipe & stick to take right side out for the final closing process • Finish gloves by completing the final procedures like piped seam, binding, Self-Folding attachment of remaining accessories and final lock stitches Trainees need to practice their skills in using methods	Classroom Real or realistic Stitching environment	Learners guide for Module-4 Samples of assembled and unassembled leather gloves Various types of Stitching Machines with complete accessories like folder, Stitch Gauge, Machine Light/Needle Light; • Single Needle Flatbed & Double Needle) • Post Bed (Single & Double

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	and equipment to perform stitching, in a real or realistic environment. Ensure following are included; • Assemble back and front panel of the gloves as per sample or instructions • Attach stitched lining with the shell • Attach accessories with the product according to design requirements • Attach piping (cuff binding, self-folding etc.) with the gloves • Finalize the gloves with closing stitches • Control the result of the sewing process according to quality standards and the sewing instruction Once learners are proficient in assembling leather gloves, hold a practical assessment using the assessment guide. Identify learners with lower level of skills and knowledge and hold additional lectures and practice sessions. Encourage more skilled learners to help other fellows to ensure collective learning and positive working environment. Make sure you emphasize on observing occupational safety and health (OSH) during all activities. Learners must be able to demonstrate their knowledge and skills relating to assembling leather gloves. Ensure that learners have the opportunity to ask questions to support their understanding.		Needle) Overlock Machine Cylinder Arm Machine Bar tack Machine Identify and tack Machine Ut panels of Leather gloves Technical files, sketches and samples of various leather gloves Assessment guide

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
LU5: Perform finishing operations on stitched gloves	Give an illustrated presentation and demonstration on finishing requirements of various types of gloves. Demonstrate using ironing tools as per the size and types of gloves. Ensure learners have adequate skills and understanding of usage of various glove shaping tools and are able to adjust glove shape using appropriate shaping tools. Recap following concepts learnt in Module-2, Module-4 and Module-5; • Quality requirements of leather gloves. • Method of checking product quality using a checklist or product sample and preparing a quality check report. • Workplace organization, 5S and good housekeeping. • Preparing and submitting work completion report. Trainees need to practice their skills in using methods and equipment to perform finishing operations after stitching, in a real or realistic environment. Make sure you emphasize on observing occupational safety and health (OSH) during all activities. Learners must be able to demonstrate their knowledge and skills relating to perform basic finishing on leather gloves. Ensure that learners have the opportunity to ask questions to support their understanding.	Classroom Real or realistic Stitching environment	Samples of leather gloves Quality check lists of various leather gloves Quality report template Trimming tools e.g. clipper scissors etc. Glove shaping tools Iron base and Iron hand o different sizes Measuring tape Cleaning brush, cotton and cloth Cleaning agent

LEATHER PRODUCTS DEVELOPMENT TECHNICIAN



Module-7
TRAINER GUIDE

Version 1 - October, 2019

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
LU1: Inspect the stitched product	Give illustrated presentations on quality requirements of leather garments and gloves and recap concepts learnt in Module-5 and Module-6. Show samples of defective leather garments and gloves and ask learners to identify defects. Give constructive feedback and ensure all learners are able to identify the defects present in the samples. Make sure to include following concepts during the session; • Basic techniques for spew threads by clipper or through burning • Methods of cleaning the stitched product for marking lines, oil stain, adhesive stain etc. • Defects like stitching defects, damaged parts, puckering of leather etc. • Methods of marking defects through chalk, paper tape etc. • Understanding technical files, sketches and master samples • Basic manufacturing process of leather products Explain contents of an inspection checklist and show samples of checklists for gloves and garments. Explain contents of a basic quality report and reporting hierarchy. Assign learners once again to inspect various types of leather garments and gloves using checklists, technical files, sketches and master samples and prepare inspection reports. Learners must be able to demonstrate their knowledge and skills relating to perform inspection of	Classroom Real or realistic finishing environment	Samples of defective leather garments and gloves Checklists, technical files, sketches and master samples of leather garments and gloves Adhesive remover Thread burner, clipper, scissors Measurement tape Chalk, masking (paper) tape, marking pen Formats of quality inspection checklists and inspection report Leather garments and gloves of various types for inspection

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	leather garments and gloves. Ensure that learners have the opportunity to ask questions to support their understanding.		
LU2: Perform	Recap following concepts;	Classroom	Size Charts
measurement control	 Basic measuring units like, mm, cm inches etc. Understanding technical sheets, Inspection of garments and gloves and making inspection report 	Real or realistic finishing environment	Measuring Tape Scale 12 Inch & 36 Inches Formats of Inspection Sheet & Technical Sheet
	Give an illustrated presentation on various sizing systems used for leather garments and gloves (e.g. UK, European, and USA etc.)		Leather garments and gloves o various types for inspection
	Show measurement charts used for various leather products and explain differences and methods.		
	Demonstrate checking measurements of various types of leather garments and gloves and fill the measurement control sheet. Ensure all learners understand the methods, tools and techniques used in performing measurement control.	ne ers in on ck nd	
	Assign learners to perform measurement control on various types of leather garments and gloves; check the filled measurement control sheets individually and provide constructive feedback. Ensure learners also perform following tasks;		
	 Check the product for required accessories and attachments Prepare inspection reports on the prescribed format 		
	Learners must be able to demonstrate their knowledge and skills relating to perform measurement		

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	control of leather garments and gloves. Ensure that learners have the opportunity to ask questions to support their understanding.		
LU3: Perform surface finishing operations	Show finished leather garments and gloves of various types and give an illustrated presentation on their finishing requirements. Learners recap methods of shaping and ironing leather gloves learnt in the Module-6 and practice their skills. Demonstrate application of dyes manually as well as by spraying method. Thoroughly explain the usage of spray gun and hold multiple practice session on application of dyes until all learners are able to apply dyes in appropriate quality. Explain purpose and demonstrate usage of pigments/chemicals for the finishing dyes e.g. wax, Filler (creams), lacquer, binder etc. Hold multiple practice session on application of wax, filler, lacquer and binder until all learners are able to apply dyes in appropriate quality. Explain hazards and risks of surface treatment chemicals and ensure learners observe occupational safety and health (OSH) during all activities. Learners must be able to demonstrate their knowledge and skills relating to perform surface finishing on leather garments and gloves. Ensure that learners have the opportunity to ask questions to	Real or realistic finishing environment	Samples of finished leather garments and gloves Technical files, sketches and master samples of leather garments and gloves Leather garments and gloves or various types for finishing Spirit Lamp Spray booth and gun Buffing machine Thread cutter Sponge Dyes Wax, crayons Creams, brushes, lacquer PPEs

Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
LU4: Pack the final product	Give an illustrated presentation on methods and techniques of packing various types of leather garments and gloves. Explain packing requirements for shipment and different export markets including tags, labels, packing material, insulations, stacking requirements etc. Demonstrate usage of various tagging tools e.g. Tag Gun, Stapler, Marking with Market, Bar Code Sticker, Hang Tag, Stamping, Tapping with branding, RFID Stickers etc. Recap the structure of the products and explain precautionary measures to maintain the shape of the products during shipping/storage. Explain contents of a basic packing report. Assign learners (in teams) to pack various types of leather garments and gloves and stack the packages in warehouse. Ensure following are included; • Apply tags and labels as per company or customer requirements • Pack the product as per shipment and customer requirements • Apply labels (bar code, identification etc.) on the package as per shipment and customer requirements • Prepare packing report on the prescribed format Explain hazards and risks of lifting heavy objects and ensure learners observe occupational safety and health (OSH) during all activities.	Real or realistic packing environment	Batches of finished leather garments and gloves Measuring tape Cutter Carton strapping tape and Taperoller Stapler Bar code printer Bar code scanner Carton strapping machine and strapping strip Weighing scale Packing instruction sheet Tag gun Fork lifter Cartons and required packing material

Module 7: Perform Finishing Operations on Leather Products			
Learning Unit	Suggested Teaching/ Learning Activities	Delivery Context	Media
	Learners must be able to demonstrate their knowledge and skills relating to perform packing of leather garments and gloves. Ensure that learners have the opportunity to ask questions to support their understanding.		

Frequently Asked Questions

1.	What is Competency Based Training (CBT) and how is it different from currently offered trainings in institutes?	Competency-based training (CBT) is an approach to vocational education and training that places emphasis on what a person can do in the workplace as a result of completing a program of training. Compared to conventional programs, the competency based training is not primarily content based; it rather focuses on the competence requirement of the envisaged job role. The whole qualification refers to certain industry standard criterion and is modularized in nature rather than being course oriented.
2.	What is the passing criterion for CBT certificate?	You shall be required to be declared "Competent" in the summative assessment to attain the certificate.
3.	What are the entry requirements for this course?	The entry requirement for this course is 8th Grade or equivalent.
4.	How can I progress in my educational career after attaining this certificate?	You shall be eligible to take admission in the National Vocational Certificate Level-3 in Leather Products Development Technician (Pattern Maker). You shall be able to progress further to National Vocational Certificate Level-4 in Leather Products Development Technician (Computerized Pattern Designer); and take admission in a level-5, DAE or equivalent course. In certain case, you may be required to attain an equivalence certificate from The Inter Board Committee of Chairmen (IBCC).
5.	If I have the experience and skills mentioned in the competency standards, do I still need to attend the course to attain this certificate?	You can opt to take part in the Recognition of Prior Learning (RPL) program by contacting the relevant training institute and getting assessed by providing the required evidences.
6.	What is the entry requirement for Recognition of Prior Learning program (RPL)?	There is no general entry requirement. The institute shall assess you, identify your competence gaps and offer you courses to cover the gaps; after which you can take up the final assessment.
7.	Is there any age restriction for entry in this course or Recognition of Prior Learning program (RPL)?	There are no age restrictions to enter this course or take up the Recognition of Prior Learning program
8.	What is the duration of this course?	The duration of the course work is 1,510 hrs. (approx. 11 months)
9.	What are the class timings?	The classes are normally offered 25 days a month from 08:00am to 01:30pm. These may vary according to the practices of certain institutes.

What is equivalence of this certificate with other qualifications?	As per the national vocational qualifications framework, the level-4 certificate is equivalent to Matriculation. The criteria for equivalence and equivalence certificate can be obtained from The Inter Board Committee of Chairmen (IBCC).
11. What is the importance of this certificate in National and International job market?	This certificate is based on the nationally standardized and notified competency standards by National Vocational and Technical Training Commission (NAVTTC). These standards are also recognized worldwide as all the standards are coded using international methodology and are accessible to the employers worldwide through NAVTTC website.
12. Which jobs can I get after attaining this certificate? Are there job for this certificate in public sector as well?	You shall be able to take up jobs in the leather products making companies in the functions of cutting, stitching and finishing of leather gloves and garments.
13. What are possible career progressions in industry after attaining this certificate?	You shall be able to progress up to the level of supervisor after attaining sufficient experience, knowledge and skills during the job. Attaining additional relevant qualifications may aid your career advancement to even higher levels.
14. Is this certificate recognized by any competent authority in Pakistan?	This certificate is based on the nationally standardized and notified competency standards by National Vocational and Technical Training Commission (NAVTTC). The official certificates shall be awarded by the relevant certificate awarding body.
15. Is on-the-job training mandatory for this certificate? If yes, what is the duration of on-the-job training?	On-the-job training is not a requirement for final / summative assessment of this certificate. However, taking up on-the-job training after or during the course work may add your chances to get a job afterwards.
16. How much salary can I get on job after attaining this certificate?	The minimum wages announced by the Government of Pakistan in 2019 are PKR 17,500. This may vary in subsequent years and different regions of the country. Progressive employers may pay more than the mentioned amount.
17. Are there any alternative certificates which I can take up?	There are some short courses offered by some training institutes on this subject. Some institutes may still be offering conventional certificate courses in the field.
18. What is the teaching language of this course?	The leaching language of this course is Urdu and English.
19. Is it possible to switch to other certificate programs during the course?	There are some short courses offered by some training institutes on this subject. Some institutes may still be offering conventional certificate courses in the field.
20. What is the examination / assessment	Competency based assessments are organized by training institutes during the course which serve the purpose of assessing the progress and preparedness of each student.

system in this program?	Final / summative assessments are organized by the relevant qualification awarding bodies at the end of the certificate program. You shall be required to be declared "Competent" in the summative assessment to attain the certificate.
21. Does this certificate enable me to work as freelancer?	You can start your small business of stitching leather garments, gloves or other products. You may need additional skills on entrepreneurship to support your initiative.

Test Yourself (Multiple Choice Questions)

1.	What is the skin of big animals called?	a. Skin b. Hide c. Grain d. Side
2.	When does the Warble fly defect occurs in skin/hide?	a. Life of animal b. Slaughtering c. Tanning d. Cutting
3.	Mention if the following statement is true or false. "The only method of cutting leather is single layer cutting."	a. True b. False c.
4.	Mention if the following statement is true or false. "The only method of cutting lining material is single layer cutting."	a. True b. False c.
5.	Which part of the skin/hide is the Front panel of jacket taken from?	a. Belly b. Butt c. Neck d. Shoulder

6.	Which of these is the most critical elment of care during tracing and cutting operation?	 a. Line of tightness and stretch b. Direction of the cuttter c. Alignment of the table d. No critical care is needed
7.	Natural thread is made of which of these materials?	a. Cottonb. Polythenec. Nylond. Cellulose
8.	Which part of needle is fixed in the stitching machine?	a. Needle eyeb. Pin pointc. Butt & shankd. Groove
9.	Which kind of adhesive is used in leather gloves?	a. Latexb. Rubberc. Cementexd. None of these
10.	How many thread ply is used in leather garments?	a. 1 ply b. 2/3 ply c. 6 ply d. 9 ply
11.	What is the bottom part of needle called?	a. Shank b. Tip c. Groove d. Butt
12.	Which kind of hammer is being used in the production of leather garments?	a. Iron b. Wooden c. Teflon d. None of these
13.	Which equipment is NOT used while cutting material for leather gloves?	a. Knife cutter b. Scissor c. Press cutter d. Laser cutter

14.	Which machine is used for stitching thumb in leather gloves?	a. Post bedb. Cylinder Armc. Flat bedd. Overlock
15.	Which tool is used to mark the defects of finished leather product?	a. Marker b. Paper Tape c. Pen d. Pencil
16.	Which material is used to remove the extra adhesive from leather products?	a. Crepe rubberb. Sand paperc. Waterd. Eraser

ANSWERS

1.	What is the skin of big animals called?	b. Hide
2.	When does the Warble fly defect occurs in skin/hide?	a. Life of animal
3.	Mention if the following statement is true or false. "The only method of cutting leather is single layer cutting."	b. False
4.	Mention if the following statement is true or false. "The only method of cutting lining material is single layer cutting."	b. False
5.	Which part of the skin/hide is the Front panel of jacket taken from?	b. Butt
6.	Which of these is the most critical elment of care during tracing and cutting operation?	a. Line of tightness and stretch
7.	Natural thread is made of which of these materials?	a. Cotton
8.	Which part of needle is fixed in the stitching machine?	c. Butt & shank
9.	Which kind of adhesive is used in leather gloves?	b. Rubber
10.	How many thread ply is used in leather garments?	b. 2 / 3 ply
11.	What is the bottom part of needle called?	b. Tip

12.	Which kind of hammer is being used in the production of leather garments?	a. Iron
13.	Which equipment is NOT used while cutting material for leather gloves?	a. Knife cutter
14.	Which machine is used for stitching thumb in leather gloves?	b. Cylinder Arm
15.	Which tool is used to mark the defects of finished leather product?	b. Paper Tape
16.	Which material is used to remove the extra adhesive from leather products?	a. Crepe rubber

National Vocational and Technical Training Commission (NAVTTC)

- Plot 38, Kirthar Road, Sector H-9/4, Islamabad, Pakistan
- +92 51 9044 322
- ⇔ +92 51 9044 32
- 🖄 info@navttc.org
- www.navttc.org