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HAND & MACHINE EMBROIDERY

CBT Curriculum

National Vocational Certificate Level 2

Version 1 - February 2020



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Introduction

The art of decorating the different material like fabric, synthetic leather and leather etc. through thread and needle with hand or by using machine is known as Embroidery. An embroider is a tradesman who specializes in drawing a design on material with needle and thread. It is person's day-to-day tasks to draw the required or new designs on the material by using different kind of stitches. This person is also competent in incorporating applique, cut work, quilting etc. with the help of different stitches. He/she understand all stitching techniques, tools and can use different colour combinations as per the requirement of customer. This person has a good command on hand embroidery techniques and stitches but not expert in specialized/regional embroideries.

Definition/ Description of the training programme for Hand Embroidery

Global fashion trends bring about swift changes in the products, processes and technology in this sector. Therefore, industry requirement for skilled workforce is increasing which can only be managed through setting relevant competency standards in collaboration with the leading industries. Being cognizant of this fact, National Vocational & Technical Training Commission (NAVTTC) developed competency standards for Hand and Machine Embroidery under National Vocational Qualifications Framework (NVQF). These competency standards have been developed by a Qualifications Development Committee (QDC) and validated by the Qualifications Validation Committee (QVC) having representation from the leading Embroided Garments manufacturing industry of the country.

Purpose of the training programme

The purpose of these qualifications is to set professional standards for Hand and Machine Embroidery Experts, who will serve as key elements enhancing quality of Pakistan's Hand Embroidery. The specific objectives of developing these qualifications are as under:

- Improve the professional competence of Hand Embroidery industry
- Capacitate the local community and trainers in modern CBT trainings, methodologies and processes as envisaged under NVQF
- Provide flexible pathways and progressions in Hand and Machine Embroidery industry
- Enable the trainees to perform their duties in efficient manner
- Establish a standardized and sustainable system of training in Hand and Machine Embroidery industry in Pakistan

Overall objectives of training programme

The objective of the training is to provide skilled manpower to improve the existing capacity in the area of embroidery. This training will provide the requisite skills to the trainees to enable them to meet the challenges in their field. The aim of this qualification is to produce employee, who

can develop quality decorative embroided products for the local and international markets. It will develop entrepreneurial traits to be selfemployed and inevitably set sustainable impact on their lives by enhancing their livelihood income.

Competencies to be gained after completion of course

At the end of the course, the trainee must have attained the following competencies:

- Comply Personal Health and Safety Guidelines
- Communicate the Workplace Policy and Procedure
- Perform Basic Communication (Specific)
- Carry Out Khaka (Mock up) Development
- Carry out different types of embroidery stitches
- Carry out different types of Embroidery Stitches by free motion machine
- Perform Finishing and Packing Operations

Possible job opportunities available immediately and later in the future

Embroiderer are employed in embroidery related industries. Experienced embroiderer may advance through promotions with the same employer or by moving to more advanced positions with other employers. They can become:

- Hand Embroidery stitches helper
- Tracer
- Hand puncher
- Helper
- Presser and packer

Trainee entry level

The entry for National Vocational Certificate Level 2, in (Hand Embroidery) "Level 2 Hand Embroider" is given below:

Title	Entry requirements
National Vocational Certificate	The entry requirement of National Vocational Certificate
level 2 in "Hand Embroidery"	Level-2 in Hand Embroidery is grade 8 th or equivalent

Minimum qualification of Trainer

Teaching staff should have at least Bachelors in Fashion & Textile with 1 years' experience in relevant field **OR** DAE with 3 years' experience in relevant field

Teaching staff should also hold or be working towards a formal teaching qualification.

Other formal qualifications in the relevant sector of industry would be useful in addition to the above.

Recommended Trainer: Trainee ratio

The recommended maximum trainer: trainee ratio for this programme is 1 trainer for 20 trainees.

Medium of instruction i.e. language of instruction

Instruction will be in Urdu and English language.

Duration of the course (Total time, Theory & Practical time)

This curriculum comprises of 07 modules. The recommended delivery time is 800 hours. Delivery of the course could therefore be full time, 6 days a week, for 06 months. Training providers are at liberty to develop other models of delivery, including part-time and evening delivery.

The full structure of the course is as follow:

Module	Total Duration (Hours)	Theory ¹ (Hours)	Practical ² (Hours)
Perform Basic Communication	20	10	10
Communicate the Workplace Policy and Procedure	20	11	09
Comply Personal Health and Safety Guidelines	30	135	165
Carry Out Khaka (Mock up) Development	30	6	24
Carry out different types of embroidery stitches	300	16	284
Perform Surface Decorative Embroidery	320	24	296
Perform Finishing and Packing Operations	80	26	54

¹ Learning Module hours in training provider premises ² Training workshop, laboratory and on-the-job workplace

Sequence of the modules

This qualification is made up of 7 modules from which 3 are generic and 4 technical. The first 3 modules are related to basics of working environment in an organization which are about health & safety, policies & procedures, and communication skills. These 3 modules will run in parallel with technical modules which we will teach in mentioned sequence of module #s 4, 5, 6, & 7. These technical modules are about training of students for the basic embroidery stitches and some decorative embroideries (Mock-up development, Different types of embroidery stitches, Surface decorative, and Finishing & packing operations). This is not prescriptive, hence training providers may modify this if they wish.

Each module covers a range of learning components. These are intended to provide detailed guidance to teachers (for example the Learning Elements component) and give them additional support for preparing their lessons. The detail provided by each module will contribute to a standardized approach to teaching, ensuring that training providers in different parts of the country have clear information on what should be taught.

Carry Out Khaka (Mock up)			
Development			
Carry out different			
types of			
embroidery	Comply Personal	Communicate the	Perform Basic
stitches	Health and Safety	Workplace Policy	Communication
Perform Surface	Guidelines	and Procedure	Communication
Decorative			
Embroidery			
Perform Finishing			
and Packing			
Operations			

Sequence of the modules for National Vocational Certificate Level 2 in "Hand Embroidery"

Summary – Overview of the Curriculum

Module Title and Aim	Learning Units	Theory Days/hours	Workplace Days/hours	Timeframe of modules
 Module 1: Perform Basic Communication Aim: The aim of this module is to develop advanced skills, knowledge and understanding about perform basic communication 	LU1: Communicate in a team to achieve intended outcomes LU2: Follow Supervisor's instructions as per organizational SOPs	10 Hours	10 Hours	20 Hours
Module 2: Communicate the Workplace Policy and Procedure Aim: The aim of this module is to develop advanced skills, knowledge and understanding about communicate the workplace policy and procedure	LU1:Identify workplace communication procedures LU2: Communicate at workplace LU3: Fill and read standard organziational format	11 Hours	9 Hours	20 Hours
Module 3: Comply Personal Health and Safety Guidelines Aim: The aim of this module is to develop advanced skills, knowledge and understanding about comply personal health and safety guidelines	 LU1: Identify Personal Hazards at Workplace LU2: Apply Personal Protective and Safety Equipment (PPE) LU3: Comply Occupational Safety and Health (OSH) LU4: Dispose of hazardous Waste/materials from the designated area 	13.5 Hours	16.5 Hours	30 Hours

Module Title and Aim	Learning Units	Theory Days/hours	Workplace Days/hours	Timeframe of modules
Module 4: Carry out Mock Up (Khaka) Development Aim: The aim of this module	LU1: Trace the design LU2: Punch the design	04 laura	<u>C Haura</u>	20 1 1 2 2 2
is to develop advanced skills, knowledge and understanding about carry out mock up (khaka) development		24 Hours	6 Hours	30 Hours
Module 5: Carry out different types of embroidery stitches	LU1: Prepare work station for basic stitches LU2: Carry out Flat Stitches LU3: Carry out Loop Stitches LU4: Carry out Knot Stitches			
Aim: The aim of this module is to develop advanced skills, knowledge and understanding about carry out different types of embroidery stitches		12 Hours	288 Hours	300 Hours
Module 6: Perform Surface Decorative Embroidery	LU1: Prepare work station for required embroidery LU2: Perform Applique work LU3: Execute cut work			
Aim: The aim of this module is to develop advanced skills, knowledge and understanding about perform surface decorative embroidery	LU4: Carry out cord (dori) work LU5: Carry out ribbon work LU6: Carry out quilt techniques LU7: Carry out drawn thread (tarkashi) work LU8: Execute smocking technique	24 Hours	296 Hours	320 Hours

Module Title and Aim	Learning Units	Theory Days/hours	Workplace Days/hours	Timeframe of modules
 Module 7: Perform Finishing Packing Operations Aim: The aim of this module is to develop advanced skills, knowledge and 	LU1: Inspect the embroided Fabric/material LU2: Perform measurement control LU3: Perform surface finishing operations LU4: Pack the final product	26 Hours	54 Hours	80 Hours
understanding about perform finishing packing operations				

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Modules

Module 1: Perform Basic Communication

Objective of the module: The objective of this module is to develop knowledge, skills and understanding required to perform basic communication

Duration:	20 Hours Theory:	10 Hours Practical: 10 Hou	ırs		
Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1: Communicate in a team to achieve intended outcomes	 The trainee will be able to: Treat team members with respect Maintain positive relationships to achieve common organizational goals Get work related information from team Identify interrelated work activities to avoid confusion Identify problems in communication with a team Resolve Communication 	Basic Learn and understand Types of communication Basic Reading Skills Basic Writing skills Basic Verbal communication skills Basic Problem-solving skills Basic Self-Management Skills Basic Self-Management Skills Basic Technology Skills Basic Interview Skills Basic Interview Skills Basic Workplace dress code Basic The role of team members and functionality of the teams Basic The role of team members and functionality of the teams Basic understanding of team management	Total 12 Hours Theory: 6 Hours Practical: 6 Hours		Class room

	barrier through discussion and mutual agreement			
LU2: Follow Supervisor's instructions as per organizational SOPs	 The trainee will be able to: Receive the instructions from Supervisor Carry out the instructions of the supervisor Report to the supervisor as per organizational SOPs 	Learn and understand the basics of organizational procedures or SOPs	Total8 HoursTheory:4 HoursPractical:4 Hours	Class room

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Module 2: Communicate the Workplace Policy and Procedure

Objective of the module: The objective of this module is to develop knowledge, skills and understanding required to communicate the workplace policy and procedure

Duration:	20 Hours Theory:	9 Hours Practical: 11 Ho	ours		
Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1: Identify workplace communication procedures	 The trainee will be able to: Identify organizational communication requirements and workplace procedures with assistance from relevant authority Identify appropriate lines of communication with supervisors and colleagues. 	Understanding of Key provisions of relevant regulations that may affect aspects of business operations, such as privacy laws Understanding and knowledge of Organizational policies, plans and procedures. Well informed with Organizational chart and line of communications	Total 6 Hours Theory: 4 Hours Practical: 2 Hours		Theory Classroom
LU2: Communicate at workplace	 The trainee will be able to: Use appropriate non-verbal behavior 	Knowledge of Barriers to communication and how to overcome Knowledge of Communication model	Total 10 Hours Theory:		Theory Classroom

	at all times • Encourage, acknowledge and act upon constructive feedback	Understanding of Verbal and written communication techniques Basic knowledge of formal and informal communication means	3 Hours Practical: 7 Hours	
LU3: Fill and read standard organizational format	 The trainee will be able to: Fill designed formats for approval, ensuring it is written clearly, concisely and within designated timeframes Ensure written information meets required standards of style, format and detail. 	 Well aware with the Standards may include: organizational policies standards set by workgroup 	Total 4 Hours Theory: 2 Hours Practical: 2 Hours	Theory Classroom

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Module 3: Comply Personal Health and Safety Guidelines

Objective of the module: The objective of this module is to develop knowledge, skills and understanding required to comply personal health and safety guidelines.

Duration:	30 hours Theory:	16.5 hours Practical: 13.5 h	nours		
Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1: Identify Personal Hazards at Workplace	 The trainee will be able to: Identify personal hygiene and safety issues at work place Identify tools and situations that have the potential to cause harm Report, identified risk to health, hygiene and safety to concerned 	Explain safety rules and regulations of organization Describe meaning of Safety signs and symbols Demonstrate understanding of safety related Standard Operating Procedure/guidelines	Total 8 Hours Theory: 5 Hours Practical: 3 Hours	Waste Bins PPEs	Theory Classroom Practical Workshop
LU2: Apply Personal Protective and Safety Equipment (PPE)	 The trainee will be able to: Identify personal protective equipment in terms of type and quantity according to work 		Total 7 Hours Theory: 3 Hours Practical:	Waste Bins PPEs	Theory Classroom Practical

	 orders. Wear personal protective equipment according to job requirements. Clean and properly store personal protective equipment 		4 Hours		Workshop
LU3: Comply Occupational Safety and Health (OSH)	 The trainee will be able to: Maintain cleanliness and hygiene during work Comply with Health, hygiene and safety precautions before starting work Comply organizational Health, hygiene and safety guidelines during work Deal with resolvable problems according to prescribed 	Explain best practices relating to clean and safe work environment	Total 8 hour Theory: 5 Hours Practical: 3 Hours	Waste Bins PPEs	Theory Classroom Practical Workshop

LU4: Dispose of	 procedures and Report un resolvable problems to concerned Place the tools equipment etc at their prescribed place after completion of work The trainee will be able to: 	Identify and list hazardous and non- hazardous waste	Total 7 hour	Waste Bins PPEs	Theory
hazardous Waste/materials from the designated area.	 Identify hazardous waste materials which needs to be disposed off Segregate hazardous or non- hazardous or non- hazardous waste carefully from the designated area as per approved procedure Use proper disposal hazardous containers for dispose-off hazardous waste as per procedure Take necessary 	Describe waste disposal SOPs	Theory: 3.5 Hours Practical: 3.5 Hours		Classroom Practical Workshop

precautions like			
putting masks and			
gloves while			
disposing hazardous	6		
waste/ materials as			
per standard			
operating procedure			

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Module 4: Carry Out Mock up (Khaka) Development

Objective of the module: The objective of this module is to develop knowledge, skills and understanding required to carry out mock up (khaka) development.

Duration:	30 Hours Theory:	6 Hours Practical: 24 Hou	ırs		
Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1: Trace the design	 The trainee will be able to: Gather required tools for work area for tracing Trace drawing on the tracing sheet as per given design 	Introduction of hand embroidery Basics of drawing elements; Uses of drawing tools Knowledge about different tools (needle, tracing wheel); Techniques of using tools Tracing materials (tracing paper, tracing polish, kerosene oil, etc.) and methods; Techniques of tracing Washing and stain removal processes Usage of PPEs	Total 13 Hours Theory: 3 Hours Practical: 10 Hours	Tracing table Sharpener Ruler	Theory Classroom Practical Workshop
LU2: Punch the design	 The trainee will be able to: Punch hole on all elements of drawing Transfer the punched design on the material 	Types of punching tools (punching machine, tracing wheel, & pins); Techniques of using punching tools; Techniques of punching process; Material for punching Marking process for transferring designs on material; Types of transferring design on fabric/material; Techniques of transferring design on various materials (fabric, leather, synthetic leather);	Total 19 Hours Theory: 3 Hours Practical: 16 Hours	Punching machine Tracing wheel Pin Pin cushion Needles (9#)	Theory Classroom Practical Workshop

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Module 5: Carry Out different types of Embroidery Stitches

Objective of the module: The objective of this module is to develop knowledge, skills and understanding required to carry out different types of embroidery stitches

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1: Prepare work station for basic stitches	 The trainee will be able to: Collect instructed material required for assigned type of stitch for embroidery Clean the workstation from dust, fluff and oil Trace design on tracing sheet [butter paper, PVC, etc.] to be embroidered if required Transfer the design on given material Set thread and needle according to material and work instructions 	Knowledge about different types of fabrics and other materials (leather, synthetic leather) used for embroidery; Embroidery threads and their classification according to thread types, shade (numbers) and sizes; Types and usage of tools & equipment (clipper, scissors, seam ripper etc,) Types of needles according to its numbers (sizes); Needle application according to required embroidery stitch Types, sizes and usage of embroidery frame (hoop) Process of cleaning by using different types of cleaning tools (sprays, brushes, dusters, etc.) Appropriate use of threads, & needles in accordance with design and surface requirements	Total 12 Hours Theory: 4 Hours Practical: 8 Hours	Tracing table Sharpener Ruler Needles Clippers Fabric scissors Paper scissors Measuring tape Tracing wheel Seam ripper Pins Pin cushions Thimble	Theory Classroom Practical Workshop

	 Interpret the instructions and artwork specifications Organize workplace according to embroidery Artwork and Design sample of the embroidered product 	Understand the nature of design and embroidery Arrange material, needle, & thread for the embroidery artwork Technical terms associated with different kinds of embroidery work		Embroidery hoop Plier	
LU2: Carry out Flat Stitches	 The trainee will be able to: Perform basting to start embroidery on the fabric/material Preform the flat embroidery stitch following the transferred design lines Perform basic type of flat stitches (Running, Back & Stem), while ensuring firmness of embroidery stitches Perform embroidery using required type of 	Learn the sequence of basic embroidery in accordance with its complexity. Understanding the concept of embroidery stitches as outline embroidery and filling design Process of fixing material with embroidery hoop Define basting & knotting and its importance in embroidery; Basting and knotting techniques in context of flat stitches Explain types of flat stitches of embroidery in proper sequence; Running Stitch - Back Stitch - Stem Stitch - Satin Stitch - Kashmiri Stitch - Couching Stitch - Cross Stitch - Herringbone Stitch	Total 113 Hours Theory: 5 Hours Practical: 108 Hours	Tracing table Sharpener Ruler Needles Clippers Fabric scissors Paper scissors Measuring tape Tracing wheel Seam ripper Pins Pin cushions	Theory Classroom Practical Workshop
	flat stitches (Herringbone, Skip, Satin, long & short, shade, couching,	Techniques and applications (purposes) of flat stitches Processes of finishing the embroidery (clipping, trimming, stain removal, washing		Thimble Embroidery hoop	

	 cross), while ensuring firmness of embroidery stitches Lock the embroidery work with final stitch while avoiding tightness 	(if required) & ironing)		Plier	
LU3:	The trainee will be able to:	Basting and knotting techniques in accordance with loop stitches	Total	Tracing table	Theory
Carry out Loop Stitches	 Perform basting to start embroidery on the fabric/material Preform the loop embroidery stitch following the traced/ transferred design lines Carry out embroidery using required type of loop stitches (chain, button hole, blanket, fishbone, feather, fly) while ensuring firmness of embroidery stitches Lock the embroidery work with final stitch 	Understanding the elements of design and their importance in embroidery process Explain types of loop stitches of embroidery in proper sequence; Chain Stitch - Lazy- daisy Stitch - Button Hole Stitch - Blanket Stitch - Fishbone Stitch - Feather Stitch - fly Stitch Techniques and applications (purposes) of loop stitches Technique and importance of controlling the thread during embroidery process Importance and usage of process of locking the embroidery; Techniques of locking the embroidery Explain about maintaining the quality considering neatness, material, stitching,	 113 Hours Theory: 5 Hours Practical: 108 Hours 	Sharpener Ruler Needles Clippers Fabric scissors Paper scissors Measuring tape Tracing wheel Seam ripper Pins Pin cushions Thimble Embroidery hoop	Classroom Practical Workshop
	 work with final siter while avoiding tightness Control the quality of 	traced lines etc. Procedure of handling the remaining thread		Plier	

	 embroidery according to quality standards and the artwork specifications Perform finishing procedures includes clipping, stain removal and ironing of final product 	and disposal of wasted material.			
LU4:	The trainee will be able	Explain types of knot stitches of embroidery	Total	Tracing table	Theory
Carry out Knot Stitches	to:	in proper sequence; French knot Stitch - Double knot Stitch - Bullion knot Stitch	62 Hours	Sharpener	Classroom
Suiches	 Perform basting to start embroidery on 	Techniques and applications (purposes) of	Theory:	Ruler	
	the fabric/material	knot stitches	2 Hours	Needles	
	 Preform the knot embroidery stitch 	Basting and knotting techniques in	Practical:	Clippers	Practical
	following the traced/	accordance with knot stitches	60 Hours	Fabric scissors	Workshop
	transferred design lines	Understanding the elements of design and their importance in knot stitching process		Paper scissors	
	 Carry out embroidery required type of knot 	Technique and importance of controlling the		Measuring tape	
	stitches (French knot,	thread during knot stitching process		Tracing wheel	
	Double knot and Bullion knot) as per	Importance and usage of process of locking the embroidery; Techniques of locking the		Seam ripper	
	given design while	embroidery in accordance with knot stitches		Pins	
	ensuring firmness of stitches:	Explain about maintaining the quality		Pin cushions	
	Lock the embroidery	considering neatness, material, stitching, traced lines etc.		Thimble	
	work with final stitch while avoiding			Embroidery hoop	

tightness	Plier	
 Control the quality of embroidery according to quality standards and the artwork specifications 		
 Perform finishing procedures includes clipping, stain removal and ironing of final product 		

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Module 6: Perform Surface Decorative Embroidery

Objective of the module: The objective of this module is to develop knowledge, skills and understanding required to perform surface decorative embroidery.

Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1: Prepare work station for required embroidery	 The trainee will be able to: Prepare the workstation for work operation (gather material, set the suitable needle, put up of cut panels to sew, technical file/ sewing instruction/sketch and sewing thread) Clean the workstation area to make it free from any potential hazards Trace design on tracing sheet [butter paper, PVC, etc.] design accurately & neatly on the fabric if required Transfer traced design on given material Fix the pattern in the embroidery hoop/adda with the help of extra 	Knowledge about different types of fabrics and other materials (leather, synthetic leather) used for embroidery; Embroidery threads and their classification according to thread types, shade (numbers) and sizes; Types and usage of tools & equipment (clipper, scissors, seam ripper etc,) Types of needles according to its numbers (sizes); Needle application according to required embroidery stitch Types, sizes and usage of embroidery frame (hoop/adda) Process of cleaning by using different types of cleaning tools (sprays, brushes, dusters, etc.) Appropriate use of threads, & needles in accordance with design and surface requirements Understand the nature of design and	Total 6 Hours Theory: 2 Hours Practical: 4 Hours	Tracing table Sharpener Ruler Needles Clippers Fabric scissors Paper scissors Measuring tape Tracing wheel Seam ripper Pins Pin cushions Thimble Embroidery hoop Plier	Theory Classroom Practical Workshop

	 fabric Fix and tighten the fabric/material on the hand frame/frame(adda) while avoiding plication Select appropriate needle & thread considering the texture, fiber and type of embroidery to be done Clarify the instructions and artwork specifications Use the materials that are free from faults Match the materials used with the specifications of embroidery Artwork and design sample of the embroidered product 	embroidery Arrange material, needle, & thread for the embroidery artwork Explain about the faults in the material (stain free, broken weave, etc.) Technical terms associated with different kinds of embroidery work			
LU2: Perform Applique work	 The trainee will be able to: Make an estimated calculation of material consumption for required work Transfer design on given applique material Fuse applique material [if requied] using ironing/pinning/basting process while maintaining surface evenness Cut material from design 	Knowledge of the embroidery styles, design & colour concepts in context with applique work Common factors affecting stitching & embroidery The actions need to be taken in the event of damaged tool/material in applique work Measurement of material according to design consumption Explain different types of fusing and lining; Their application and usage	Total 42 Hours Theory: 3 Hours Practical: 39 Hours	Tracing table Sharpener Ruler Needles Clippers Fabric scissors Paper scissors Curve scissor	Theory Classroom Practical Workshop
	 outline or Cut the material with seam allowance for rali work, whichever required according to design Tack applique patch with embroidery stitches on given material at designated position Lock the embroidery work with final stitch while avoiding tightness Control the quality of embroidery according to quality standards and the artwork specifications Perform finishing procedures includes clipping, stain removal and ironing of final product 	techniques according to design requirements The problems encountered when working on different types of materials during fusing process Process of cutting applique piece with or without seam allownce Process of tacking applique piece through stitch Importance and usage of process of locking the embroidery; Techniques of locking the embroidery Different types of defects and their segregation Technique and importance of controlling the plication during applique process Procedure of handling the remaining thread and disposal of wasted material.		Measuring tape Tracing wheel Seam ripper Pins Pin cushions Thimble Embroidery hoop Plier	
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LU3: Execute cut work	 The trainee will be able to: Perform basting to start embroidery on the fabric/material Perform embroidery followed by lock/chain stitch on given material following the traced/ transferred design 	Basting and knotting techniques in cut work process Principle of designs Techniques of chain and lock stitch. Explain positive and negative area in embroidery design Types of cut work according to design	Total 20 Hours Theory: 2 Hours Practical: 18 Hours	Tracing table Sharpener Ruler Needles Clippers Fabric scissors	Theory Classroom Practical Workshop

	 lines/dots Cut the negative areas of design with appropriate tool Perform button hole stitch to achieve even borderline finishes Lock the embroidery work with final stitch while avoiding tightness, if required Control the quality of embroidery according to quality standards and the artwork specifications Perform finishing procedures includes clipping, stain removal and ironing of final product 	and material Methods of cut work with different tools Explain about button hole stitch and its Techniques Techniques of locking the embroidery work during cut work		Paper scissors Curve scissor Measuring tape Tracing wheel Seam ripper Pins Pin cushions Thimble Embroidery hoop Plier Solder	
LU4: Carry out cord (dori) work	 The trainee will be able to: Perform basting to start embroidery on the fabric/material Develop a cord with different material as per design requirement Fix cord in the given design with overlap embroidery stitch considering tightness Lock the embroidery work 	Types and designs of cord; Process of developing a cord with different materials (kora, silk, tilla) Techniques of attaching a cord on or at the design with simple stitch Basting techniques for the cord work Techniques of locking the embroidery work during cord work Procedure of finishing the stitched	Total 8 Hours Theory: 1 Hour Practical: 7 Hours	Sharpener Ruler Needles Clippers Fabric scissors Paper scissors Measuring tape Seam ripper	Theory Classroom Practical Workshop

	 with final stitch while avoiding tightness, if required Control the quality of embroidery according to quality standards and the artwork specifications Perform finishing procedures includes clipping and stain removal of final product 	product		Pins Pin cushions Thimble Embroidery hoop Plier	
LU5: Carry out ribbon work	 The trainee will be able to: Perform basting to start embroidery on the fabric/material Burn ribbon from starting and ending points Attach ribbon with sew-in procedure by following design Develop ribbon ornaments (flower, petal etc.) by twisting and folding techniques as per design requirements Lock the embroidery work with final stitch while avoiding tightness, if required Control the quality of embroidery according to 	Types (silky, tissue, & organza) and sizes (numbers) of ribbon Usage of ribbon with and without decorative material; Techniques of attaching ribbons with embroidery; Techniques of designing different shapes (ornaments) from ribbon Basting and knotting techniques in ribbon work Techniques of locking the embroidery work during ribbon work Procedure of finishing the stitched product	Total 42 Hours Theory: 2 Hour Practical: 40 Hours	Tracing table Sharpener Ruler Needles Clippers Fabric scissors Paper scissors Measuring tape Tracing wheel Seam ripper Pins Pin cushions Thimble	Theory Classroom Practical Workshop

	 quality standards and the artwork specifications Perform finishing procedures includes clipping and stain removal of final product 	Define and evaluin about guilt to the image	Tatal	Embroidery hoop Plier	Theory
LU 6: Carry out quilt techniques	 The trainee will be able to: Estimate material consumption according to given design Select appropriate needle & thread considering the texture, fiber of material for embroidery on quilt Iron the material and transfer given design on given material to remove plication Perform cutting of the material to be quilted Perform basting to start embroidery on the fabric/material Pin and sew material with quilt backing sheet by avoid puckering under the given material Lock the embroidery work with final stitch while avoiding tightness Control the quality of 	Define and explain about quilt techniques Knowledge about quilts and its types; Usage of quilts; Explain different types of fusing and lining used in quilting; Their application and usage techniques according to quilting design requirements Process of attaching different materials for quilting; Process of cutting the material during quilting; Explain about running stitch and its Techniques Techniques of locking the embroidery work during quilt work Procedure of finishing the stitched product	Total 42 Hours Theory: 2 Hour Practical: 40 Hours	Tracing table Sharpener Ruler Needles Clippers Fabric scissors Paper scissors Measuring tape Tracing wheel Seam ripper Pins Pin cushions Thimble Embroidery hoop Plier	Theory Classroom Practical Workshop

	 embroidery according to quality standards and the artwork specifications Perform finishing procedures includes clipping and stain removal of final product 				
thread (tarkashi) work	 Mark the given design on fabric Select appropriate needle according to fabric weave Pick out threads from the warp or the weft of a piece of even weave fabric by avoiding breakage of the thread Make Knot and wrap embroidery thread delicately on left fabric weave (warp/Weft) to create a required design, 	 (tarkashi) Process of marking the material for drawn thread work Knowledge about weave of material; Techniques to pick equal numbers of threads from wrap or weft while avoiding breakage; Explain about running stitch and its techniques; Procedure of running stitch to secure base for embroidery Define knotting process and its techniques through maintaining neatness 	80 Hours Theory: 6 Hour Practical: 74 Hours	Tracing tableTheorySharpenerClassroomRulerPracticalNeedlesPracticalClippersWorkshopFabric scissorsWorkshopPaper scissorsImage: ClippersMeasuring tapeTracing wheelSeam ripperImage: Clippers	Practical
	 while counting number of warp/weft Make a Knot of the embroidery thread edges by avoiding crumpling of warp/weft Perform finishing procedures includes knotting edges, clipping, 	and quality Explain about back stitch and its techniques; Process of filling the design with back stitch		Pins Pin cushions Thimble Embroidery hoop Plier	

	ironing and stain removal of final product				
LU8:	The trainee will be able to:	Define and explain smocking and its	Total	Tracing table	Theory
LU8: Execute smocking technique	 The trainee will be able to: Mark the given design on the fabric Perform a dotted square grid of evenly-spaced on the fabric with fabric pen or a pencil. Perform basting on the dots to start smocking embroidery technique Gather the fabric by Pulling the thread to make even tight pleats, tie knot at the tail of each thread and cut off extra thread Perform stem stitch in two pleats of the fabric and join the pleats one by one with continuity Perform wave stitch between all pleats to make edges Perform finishing procedures includes 	Define and explain smocking and its techniquesProcess of marking the fabric/material to perform smocking;Technique of designing square grid with evenly-spaced on materialExplain about running stitch to cover the square grid dotsDefine pleats and its types; Procedure of gathering the fabric to create pleats in smocking techniqueExplain stem stitch, its types and process for smockingProcess of joining the pleats with each other for smockingExplain process of wave stitch; Techniques of making zigzag through 	Total 80 Hours Theory: 6 Hour Practical: 74 Hours	Tracing table Sharpener Ruler Needles Clippers Fabric scissors Paper scissors Measuring tape Tracing wheel Seam ripper Pins Pin cushions Thimble Embroidery hoop Plier	Theory Classroom Practical Workshop
	clipping and stain removal of final product				

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HAND & MACHINE Embroidery

CBT Curriculum

National Vocational Certificate Level 2

Version 1 - February 2020

Module-7

Module 7: Perform Finishing & Packing Operations

Objective of the module: The objective of this module is to develop knowledge, skills and understanding required to perform finishing & packing operations.

Duration:	80 Hours Theory:	26 Hours Practical: 54 Hou	urs		
Learning Unit	Learning Outcomes	Learning Elements	Duration	Materials Required	Learning Place
LU1: Inspect the embroided Fabric/material	 The trainee will be able to: Clean the product for dust and stains Inspect the product for all quality requirements as per product design Mark all defects / noncompliance areas on the product with prescribed tools Prepare inspection report on the prescribed format 	 Knowledge about the basic manufacturing process of leather products Understanding about basic techniques for spew threads by clipper or through burning Learning to clean the stitched product from marking lines, oil stain, adhesive stain etc. knowledge of defects like stitching defects, damaged parts, puckering of leather etc. Knowledge to mark the defects through chalk or paper tape Knowledge to complete the basic quality report 	Total 10 Hours Theory: 02 Hours Practical: 08 Hours	Adhesive remover Thread Burner, Clipper Measurement Tape Scissors, Format of Quality Inspection report	Theory Classroom Practical Workshop
LU2: Perform measurement control	 The trainee will be able to: Control the measurement of the 	 Understanding about sizing system like UK, European, USA Understanding of basic measuring units like; mm, cm, inches etc. 	Total 15 Hours Theory:	Size Charts Measuring Tape Scale 12 Inch &	Theory Classroom

	leather product	Knowledge to understand technical	08 Hours	36 Inches	Practical
	according to the measurement chart • Prepare inspection reports on the prescribed format	sheet (specification) and to check all given accessories for the product development Knowledge to complete the basic inspection report	Practical: 07Hours	Format of Inspection Sheet & Technical Sheet	Workshop
LU3:	The trainee will be able to:	Knowledge about finished product	Total	Spirit Lamp	Theory
Perform surface finishing	• Remove reinforcement material from the	Basic knowledge of available pigments/chemicals for the finishing dyes	25 Hours	Spray Booth	Classroom
operations	embroided fabric/material	e.g. wax, Filler (creams), lacquer, binder etc.	Theory:	Buffing Machine	
	Perform finishing procedures including	Understanding the application of dyes for	05 Hours	Spray Gun	Practical
	clipping, stain removal from the final product, if	the related product by hand or by spray gun	Practical:	Thread cutter	Workshop
	required.	Understanding of waxing application by hand or machine	20 Hours	Apron	
		Understanding the hazards and risks of surface treatment chemicals			
LU4:	The trainee will be able to:	Understanding the usage of various	Total	Ready product	Theory
Pack the final product	• Apply tags and labels as	tagging tools e.g. Tag Gun, Stapler,	10 Hours	Measuring tape	Classroom
	per company or	Marking with Marker, Bar Code Sticker,	Theory:	Cutter	
	customer requirementsPack the product as per	Hang Tag, Stamping, Tapping with			

shipment and customer	branding, RFID Stickers,	02 Hours	Tape Dispenser	Practical
 Apply labels (bar code, identification etc.) on the package as per shipment and customer requirement 	Understanding the structure of the product and taking precautionary measures to maintain the shape of the product during shipping/storage Knowledge the shipping instructions from	Practical: 08 Hours	Stapler Bar code printer Bar code scanner Carton Strapping	Workshop
 Prepare packing report on the prescribed format 	customer. Knowledge to fill the basic packing report		machine Weighing scale Packing instruction Form Tag Gun	

GENERAL ASSESSMENT GUIDANCE for the Hand and Machine Embroidery

Each module/ competency standard will be assessed through a combination formative assessment at the completion of each module as an internal assessment and a final summative assessment on the completion of the qualification by the Qualification Awarding Body though a qualified assessor.

Formative assessment: the institute conducts formative assessments on the completion of each module as an internal assessment by the resource person. Its purpose is to provide feedback to the trainees on real time environment:

- To the trainee: to identify achievement and areas for further improvements
- To the trainer: to evaluate the effectiveness of transfer of skill and knowledge and plan for further.

Summative assessment: On completion of the qualification the Qualification Awarding Body (QAB) conducts a formal summative assessment where the qualified national assessor declares a candidate "Competent" or "Not Yet Competent" with a detailed feed back to the trainees on the performing of the activities as per modules.

Methods of assessment

During assessment a direct observation during performance by the trainee is conducted while collecting solid evidence based on each module.

Examples for direct assessment of a Hand & Machine Embroidery L-2 expert includes:

- Work performances: performing the tasks for each assignment as prescribed in the modules.
- Demonstrations: performing and presenting the final outcomes of the completion of each module.
- Direct questioning, where the assessor would ask the trainees questions related to their learning outcomes.
- Paper-based tests: if required the assessor will use some paper based test to know the understanding of the trainees during the leaning phase.

Indirect assessment is the method used where the performance could not be watched and evidence is gained indirectly. Indirect assessment will only be a second choice.

Principles of assessment

All assessments should be valid, reliable, fair and flexible:

Fairness refers that each trainee should get to equal chance for performing the duties during the assessment process.

Validity means that an assessment is conducted for what it claims to assess.

Reliability refers to consistency in outcomes based on performance or demonstration.

Flexibility means that the assessor has to be flexible concerning the assessment approach in evaluating the trainees for its competence.

Complete List of Tools and Equipment

Sr#	Name of Item/ Equipment/ Tools	Quantity
1	Bar code printer	04
2	Bar code scanner	04
3	Buffing Machine Small	04
4	Buffing Machine Large	01
5	Carton Strapping machine	04
6	Clippers (Thread Remover)	40
7	Curve scissor	20
8	Knife (Paper Cutter)	20
9	Embroidery hoop (Small, Medium, Large)	20 each
10	Fabric scissors	20
11	Measurement Tape	20
12	Paper scissors	20
13	Pin cushion	04
14	Plier Set	04
15	PPEs (Googles)	20
16	Punching machine	04
17	Ruler (12", 36")	20 each
18	Size Charts	04
19	Solder iron	20
20	Spirit Lamp (Thread Burner)	04
21	Spray Booth	02
22	Spray Gun	04
23	Stapler Machine	04
24	Tag Gun	04
25	Tape Dispenser	10
26	Tracing table	04
27	Tracing wheel	10

28	Waste Bins	04
29	Weighing scale	04
30	Free Motion Machine	20
31	Glue gun	04
32	Frame/Adda	20
33	Wood Stools (height 12 inch) for frame Adda	20
34	Wood Stools (height 24 inch) for finishing table	20
35	White board	02
36	Finishing table (4x8)	05
37	Wood Stools (height 18 inch) for free motion machine	20

List of consumable supplies

Sr#	Name of Consumable Supplies
1.	Detergent
2.	Dusters
3.	Embroidery threads (Silk, Cotton, Polyster)
4.	Fabric
5.	First aid kit
6.	Foaming sheet
7.	Fusing (Reinforcement Material)
8.	Kerosene oil
9.	Leather Skin
10.	PVC sheet
11.	Lighter
12.	Machine Oil
13.	Mesh (Raxon)
14.	Paper Tape
15.	Pencil
16.	Pointer
17.	Butter paper
18.	Ribbon
19.	Rubber
20.	Surface cleaner sprays
21.	Tracing ink (Neel)
22.	Synthetic Leather (raxine)
23.	Tailoring chalk
24.	Shoe Polish
25.	Adhesive Remover
26.	Inspection Reports Format book
27.	Needles (Different Sizes)
28.	Glue

29.	Glue rod
30.	Common Pins
31.	PPEs (Cap, Mask, Apron, Finger Thimble)

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