GOVERNMENT OF THE PUNJAB

TECHNICAL EDUCATION & VOCATIONAL TRAINING AUTHORITY

TEVTA

CURRICULUM FOR

INDUSTRIAL STITCHING MACHINE OPERATOR

(3 – Months Course)
Revised April 2016

APPROVED
Date: 7- 4 - 16
Sign:

CURRICULUM SECTION
ACADEMICS DEPARTMENT
96-H, GULBERG-II, LAHORE
Ph # 042-99263055-9, 99263064
gm.acad@tevta.gop.pk, manager.cur@tevta.gop.pk

TRAINING OBJECTIVES

This course is designed for the participants who want to join garment industry as a stitcher or industrial stitching machine operator. In this course the student will get the operating skill and knowledge of special garment machines, their function, lubrication minor faults and remedies. The purpose of this course is to enhance productivity with quality.

This course aims at producing semi skillful workforce for Garments Industry in the field of Industrial Stitching Machine. This workforce shall be given adequate training in operating the various stitching machines generally used in Garments Industry.

Emphasis will also be on character building of students during their training by delivering motivational lectures on patriotism and discipline.

CURRICULUM SALIENT

Name of Course	:	Industrial Stitching Machine Operator
Entry level	:	Matric
Duration of course	:	3-Months.
Total training hours.	:	400 Contact hours.
Training Methodology	:	Practical 80%
		Theory 20%

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Curriculum Development Section, Academics Department TEVTA
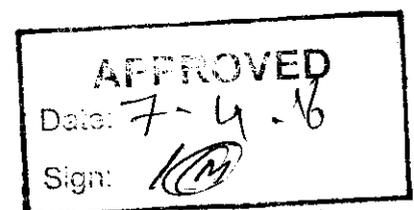
SKILL PROFICIENCY DETAILS

On successful completion of this course, the trainee should be able to: -

1.   Clean machines (Before & after work).

2.   Wind a bobbin, thread a machine, thread color change, without removing complete thread (by knotting) adjust tension, choose and change a needle.

3.   Differentiate the needs of Lock Stitch, Over Lock, and Button Hole & Button Stitch Machines etc.

4.   Operate machines, handle garment and control speed of each machine properly.

5.   Exercises paper / card sewing (simple to complex shapes).

6.   Sew on Rags.

7.   Make various shapes on fabric pieces e.g. collar, placket; side-vents etc.

8.   Produce maximum work in minimum time with required quality.

9.   Rectify the causes of thread breaking, bobbin thread breaking and their remedies.

10.   Rectify the causes of skip stitches.

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KNOWLEDGE PROFICIENCY DETAILS

On successful completion of this course, the trainee should be able to: -

1.   Explain types and functions of different Industrial Sewing Machines.

2.   Describe parts of Sewing Machines/ their factions.

3.   Explain Oiling and cleaning all type of sewing machines (before & after work).

4.   Describe installation of different accessories.

5.   Define causes of thread breakages, skip, and jump stitches & needle breakages.

6.   Describe care before Operation.

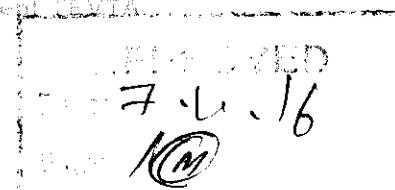7.   Describe care during Operation.

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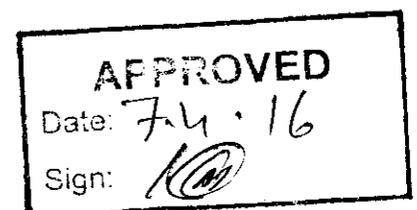
SCHEME OF STUDIES
Industrial Stitching Machine Operator
(3 - Months Course)

S. No	Main Topics	Theory Hours	Practical Hours	Total Hours
1.	Introduction to Garment Industry, Fabric & industrial stitching machines	18	-	18
2.	Single needle lock stitch sewing machine	10	150	160
3.	Chain Stitch Machine	10	46	56
4.	Over lock Machine	10	66	76
5.	Button Hole Machine	5	10	15
6.	Button Stitch Machine	5	10	15
7.	I.T Fundamentals	4	16	20
8.	Functional English	15	25	40
	Total	**77**	**323**	**400**

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Academic Department TEVTA

DETAIL OF COURSE CONTENTS
Industrial Stitching Machine Operator
(3-Month Course)

| S. No.	Detail of Topics	Theory Hours	Practical Hours

1.	**Introduction to Garment Industry, Fabric & Industrial Stitching Machines**
	
	1.1 Garments Industry
	
	1.2 Fabric
	
	       1.2.1 Knitted Fabric
	
	       1.2.2 Woven
	
	       1.2.3 Denim
	
	1.3 Industrial Stitching Machines
	
	       1.3.1 Flat Lock Machine
	
	       1.3.2 Chain Stitch Machine
	
	       1.3.3 Pressing (Ironing) Garments
	
	       1.3.4 Bartack Machine
	
	       1.3.5 Loop make Machine
		18	-

2.	**Single needle lock stitch sewing Machine** 2.1 Introduction of Machine Parts, Operator Sitting Posture. 2.2 Machine Cleaning, oiling and Basic Maintenance (precautions) 2.3 Machine Threading/Color Changing 2.4 Needle Selection according to the Fabric being stitched. 2.5 Thread Breakages, their causes 2.6 Needle Breakages, their causes 2.7 Use of different sizes of boots, according to seams 2.8 Bobbin Winding	10	70

2.9	Machine Control exercise	
2.10	Papers sew exercises without Thread:	
	• Straight	
	• Curved,	
	• Rectangle	
	• Square	
	• Circle	
2.11	Repeat the same exercises on fabric.	
2.12	Practice to attach pocket on a simple fabric exercises	
2.13	Practice to make placket on simple fabric (Ten Exercises).	
2.14	**Project**	70
	2.14.1 Stitch polo shirt.	
	• Procedure.	
	• Stitch the placket.	
	• Stitch the shoulders	
	• Stitch arm hole seams.	
	• Stitch side seams.	
	• Hem sleeve edges.	
	• Hem bottom edges.	
	• Attach on the placket.	
	• Button hole on the placket.	
	• Button stitch on the placket.	
2.15	**Instructions**	10
	2.15.1 Select needle and thread according to the material	
	2.15.2 Color match as per specs.	
	2.15.3 Check stitches per inch (SPI).	
	2.15.4 Check stitch faults and rectify them / stitch	

	opening & mending.		
	2.15.5 Stitching garment according to the specs.		
	2.15.6 Clip according to the quality.		
	2.15.7 Press garments, after completion.		
	2.15.8 Check garments, after pressing.		
3.	**Chain Stitch Sewing Machine**	10	46
	3.1 Introduction of machine parts		
	3.2 Machine Cleaning, Oiling and Basic		
	3.3 Fabric Exercise		
4.	**Over lock Machine**	10	66
	4.1 Introduction of machine		
	4.2 Operator sitting posture.		
	4.3 Important parts of machine		
	4.4 Function of machine parts		
	4.5 Oiling and cleaning machine		
	4.6 Precautions.		
	4.7 Care in operation.		
	4.8 Needle & thread knowledge.		
	4.9 Tension & Cutter adjustment		
	4.10 Machine control exercises.		
	4.11 Fabric shape exercises (Straight, round and curved)		
	4.12 Needle & thread breakages fault.		
	4.13 Stitch length adjustment		
	4.14 Panel Exercises (Crotch. Arm hale, front and back panel edges parallel.		
	4.15 How to hold panel, how to cut adjustment of bits, how to drop		
	4.16 **Project**		
	4.16.1 Over Lock the project which was stitched on the single needle Lock stitch sewing		

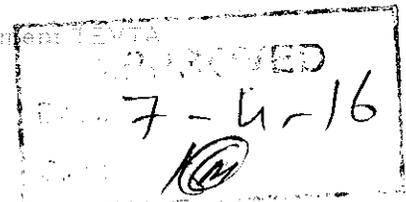|			
	machine.		
5.	**Button Hole Machine**	5	10
	5.1 Introduction of Machine parts.		
	5.2 Machine Oiling, cleaning and Basic Maintenance.		
	5.3 Needle and Threading		
	5.4 Machine and adjustment of cutters		
	5.5 Button hole size, proper placement of fabric under presser foot		
	5.6 Different sizes of button hole		
	5.7 Five (5) Exercises		
6.	**Button Stitch Machine**	5	10
	6.1 Introduction of Machine.		
	6.2 Oiling, Cleaning and Basic Maintenance.		
	6.3 Pattern formation		
	6.4 Button marking with help of pattern		
	6.5 Adjustment of button on Machine		
	6.6 Placement of fabric under boot		
	6.7 Attach different sizes of button		
	6.8 Five (5) Exercises		
Total		**58**	**282**
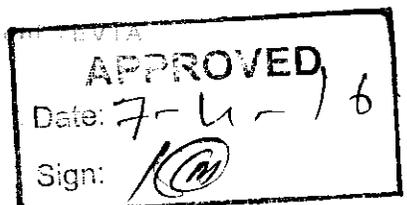
LIST OF PRACTICALS

1. Single needle lock stitch operations

2. Chain stitch machine operations

3. Paper exercises (simple to complex shapes)

4. Flat lock machine operations

5. Bartack machine operations

6. Fabric exercise (simple to complex shapes)
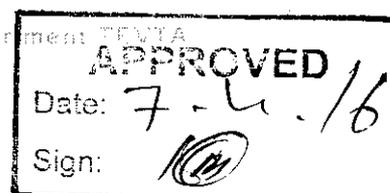
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SCHEME OF STUDIES

I.T. Fundamentals

S.No	Main Topics	Theory Hours	Practical Hours	Total Hours
1.	Introduction to Computers	1	4	5
2.	Typing - Microsoft Word	2	6	8
3.	Internet & Electronic Mail	1	6	7
	Total	**04**	**16**	**20**

DETAIL OF COURSE CONTENTS
I.T Fundamentals

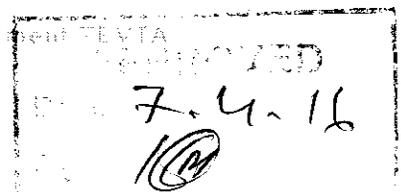| S. No	Detail of Topics	Theory Hours	Practical Hours

1	**Introduction to Computers**
	
	1.1 What is a computer- Definition, functions and general features?
	
	1.2 What is Hardware –
	    1.2.1 Computer parts and units
	        1.2.1.1 Input Unit - Keyboard, Mouse etc.
	        1.2.1.2 Central Processing Unit
	        1.2.1.3 Output Unit
	
	1.3 What is Software –
	    1.3.1 Electronic Parts of a Pc it is
	        1.3.1.1 Software and Its types
	        1.3.1.2 System Software, Application Software
	
	1.4 Working with windows Operating System
	    1.4.1 How does windows desktops work?
	
	1.5 What are the Icons, Shortcuts and other graphic,
	    1.5.1 How to see computer contents on different drives etc
		1	4

2	**Typing and Word processing (MS Word)** 2.1 Proper way of typing correct and speedy - getting familiar with the keys 2.2 Where to type in computer? How to save a file? How to get it back? Where to find your saved work? 2.3 How to get it printed?	2	6
3	**Emailing and Internet Surfing** 3.1 How to go to Internet, what is required for an internet connection etc. 3.2 How to use email? How to search on web?	1	6

		Etc		
	3.3	How to make new email account, login and logout an email account etc.?		
		Total	**04**	**16**

LIST OF PRACTICALS
I.T Fundamentals

| S. No.	Name of Practical
1.	Turn On/Off and setting of power supply
2.	Accessing The Desktop
3.	Using of Icons and Shortcuts
4.	Setting / customizing the desktop
5.	Viewing the contents of computer – Directory
6.	Copying, Deleting and Moving Files in a folder
7.	Working with different Applications
8.	Opening MS Word for typing
9.	First lesson of Typing A S D F
10.	Second Lesson of typing J K L ;
11.	Third Lesson U I O P
12.	Fourth Lesson R E W Q
13.	Fifth Lesson N M , .
14.	Sixth Lesson V C X Z
15.	Seventh Lesson All letter using R index Finger
16.	Eighth Lesson All letter using L index Finger
17.	Formatting in MS Word Bold, Italic etc.
18.	Using Internet
19.	Opening Email, making new account
20.	Sending Receiving Emails

SCHEME OF STUDIES
Functional English

S.No	Main Topics	Theory Hours	Practical Hours	Total Hours
1.	Introduction of English Sentence Structure	2	3	5
2.	Use of present indefinite tense	2	3	5
3.	Use of 'is' 'are' 'am' questions and negatives	2	3	5
4.	Ask questions	2	3	5
5.	Express daily routines	2	3	5
6.	Know how to address people	1	2	3
7.	Provide written feedback	1	2	3
8.	Dialogues	1	2	3
9.	Understand vocabulary	1	2	3
10.	Application/C.V.	1	2	3
	Total	**15**	**25**	**40**

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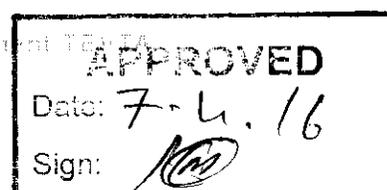
DETAIL OF COURSE CONTENTS
Functional English

S. No	Detail of Topics	Theory Hours	Practical Hours
1	Introduction of English sentence structure	2	3
2	Use of present indefinite tense with exercises	2	3
3	Use of 'is' 'are' 'am' questions and negatives	2	3
4	4.1　Ask questions 　　4.1.1　At work place 　　4.1.2　In the market 　　4.1.3　In classroom	2	3
5	5.1　Express daily routines 　　5.1.1　Before going to college 　　5.1.2　Dealing with colleagues 　　5.1.3　Going to market	2	3
6	6.1　Know how to address people 　　6.1.1　In Meetings 　　6.1.2　In class	1	2
7	7.1　Provide written feedback 　　7.1.1　After visiting the market 　　7.1.2　On some official task	1	2
8	8.1　Dialogues 　　8.1.1　With colleague 　　8.1.2　Teacher/student 　　8.1.3　Employer/employee 　　8.1.4　Booking on railway station	1	2
9	Understand vocabulary	1	2
10	Application / C.V.	1	2
	Total	**15**	**25**
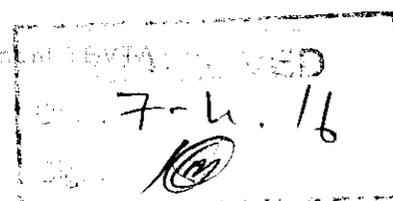
LIST OF PRACTICALS
Functional English

S. No.	Practical
1.	Group discussion
2.	Interviews
3.	Role play

LIST OF LABS

Industrial Stitching Machine Operator

- Sewing Lab

I.T Fundamentals

- Computer Lab

LIST OF MACHINERY / EQUIPMENT / TOOLS
(For a Class of 25 Students)

Name of Trade	Industrial Stitching Machine Operator
Duration of Course	3-Months

S. No.	Nomenclature of equipment / Tools	Quantity
1	Single Needle Lock Stitch Machine	20
2	Over Lock Machine	02
3	Flat Lock Machine	01
4	Button Hole Machine	01
5	Button Stitch Machine	01
6	Chain Stitch Machine	05

COMPUTER LAB

S. No.	Tools / Equipment	Quantity
1.	Desktop computer (Specifications as per notification issued by MIS Section, TEVTA)	26 (1 for each student & 1 for the teacher)
2.	Printer (Laser)	01
3.	Scanner	01
4.	Internet Connection (At least 1 MB speed)	01
5.	UPS 10 KVA	01
6.	Air Conditioner 1 ½ Ton	02
7.	Multimedia Projector	01
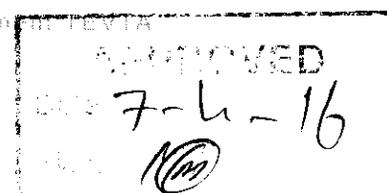
LIST OF CONSUMABLES

Industrial Stitching Machine Operator

S. No.	Item	Quantity
1.	Stitching Exercise Paper	As per requirement
2.	Fabric	As per requirement
3.	Threads	As per requirement
4.	Needles	As per requirement
5.	Clipers	As per requirement

Functional English

S. No.	Item	Quantity
1.	Stationery	As per requirement
2.	Board Markers	As per requirement

I.T Fundamentals

S. No.	Item	Quantity
1.	Printing Paper	As per requirement
2.	Printer Toner	As per requirement

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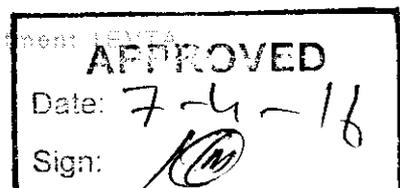
MINIMUM QUALIFICATION OF TEACHER / INSTRUCTOR

- 3-Years Diploma (D.D.M) + 2 – Year Industrial cum Teaching Experience.

<div align="center">OR</div>

Operator from Industry with 10 years experience

<div align="center">OR</div>

2 Year Certificate in Dress Making / DVG + 6 – Month Certificate Stitching Machine operator Course with 3 – Year Industrial cum Teaching With
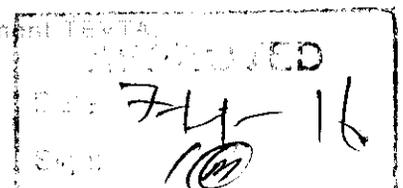

- Sample Master (Cutting Purpose) with 3 – Years Experience.

Functional English

- M.A. (English)

I.T Fundamentals

- DAE CIT/ BCS from HEC recognized university

REFERENCE BOOKS

Industrial Stitching Machine Operator

1.   Machine Operating and Maintenance Manuals

2.   Garments Manufacturing Technology by Eiri

Functional English

1.   High School English Grammar By Wren & Martin

2.   Oxford English Grammar

I.T Fundamentals

1.   Introduction to Computer by Peter Norton

2.   2007 Microsoft® Office System Step by Step by Joyce Cox, Steve Lambert and Curtis Frye

3.   Internet and E-mail with Windows 7 by Studio Visual Steps

EMPLOYABILITY OF PASS OUTS

The pass-out of this course may work in the following sectors / areas and positions:

1.   Garment Factories (Knitwear + Woven garments) / Denim
2.   Self-Employment.
3.   Cottage Industry.

LIST OF TRADE RELATED JARGON

Words	Meaning
Skill	بہنر
High Speed	تیز رفتار
Separately driven needle change over lever	علیحدہ سے چلنے والی سوئی کا بنچ اور لیور
Thread Take-up Cover	تھریڈ ٹیک اپ کور
Knitted fabric	ٹنگ مشین پر بنا ہوا کپڑا
Finger Guard	فنگر گارڈ
Skip Stitch	ٹانکہ چھوڑنا
Thread Tension Controller	تھریڈ ٹینشن کنٹرول
Pedal	پیڈل
Knee Lifter	نی لفٹر
Power Switch	پاور سوئچ
Operation	آپریشن پیش
Attachment	جوڑنے والا پرزہ
Oil Supply Window	آئل سپلائی ونڈو
Reverse Lever	ریورس لیور
Needle Breakage	سوئی کا ٹوٹنا
Presser Foot	پریسر فٹ
Feed Dog	فیڈ ڈاگ
Needle Bar	نیڈل بار

Needle Screw	نیڈل سکریو
Pully	پلی
Boot	پریسر فٹ
Shuttle	شٹل
Tension Disk	ٹینشن ڈسک
Thread Retainer	تھر یڈ ریٹینر
Throat Plate	تھروٹ پلیٹ
Toes (Prongs)	ٹوز
Instructions	ہدایات
Selection	انتخاب
Stitch length	ٹانکے کی لمبائی
Shauk	سوئی کا اوپر والا حصہ
Blade	سوئی کا نیچا حصہ
Woven Fabric	کھڈی پر بنا کپڑا
Quality	معیار
Cliper	دھاگے کو کاٹنے والا
Damage	خراب
Alteration	مرمت
Reject	معیار پر پورا نہ اترنا
Furing	چپکانے والی بکرم
Pile	ڈھیر دار

Curriculum Revision Committee

1.	**Ms. Qureshia Sultana,** Instructor (Fashion Designing), GCT (W) Lytton Road, Lahore	**Convener**
2.	**Ms. Abida Khalid,** Instructor DDM, GCT (W) Lytton Road, Lahore	**Member**
3.	**Mr. Ali Ashraf,** Sr. Assist Manager (Product Development) US Apparel (Pvt.) Ltd. Unit # 3, C/O Al-Hafiz Karyana & General Store Main Street, New Islam pura, Toba Tek Singh.	**Member**