



**STANDARD KEMAHIRAN PEKERJAAN KEBANGSAAN
(NATIONAL OCCUPATIONAL SKILLS STANDARD)**

**STANDARD PRACTICE, STANDARD CONTENT
& CURRICULUM of COMPETENCY UNIT
FOR**

**SEWING OPERATION
LEVEL 2
TA-020-2:2014**



JPK

KEMENTERIAN SUMBER MANUSIA



**MALAYSIAN TEXTILE AND APPAREL
CENTRE**

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Department of Skills Development (DSD)

Ministry of Human Resources

62530 PUTRAJAYA, MALAYSIA

**NATIONAL OCCUPATIONAL SKILLS STANDARD (NOSS)
DEVELOPMENT GUIDELINE**

**Version 1.0
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GLOSSARY

Apparel	Apparel defines clothing and garments, which are textile materials worn on the body
Armhole	Opening in the bodice to which the sleeve is attached to
Dart	Common technique used for shaping garments. Darts are created by stitching out a wedge-shaped fold of fabric
Embroidery	Variety of decorative needlework in which designs and pictures are created by stitching strands of some material on to a layer of another material
Eyelet	And eyelets are metal, plastic, or rubber rings that are inserted into a hole made through another material. They may be used to reinforce the hole, to shield something from the sharp edges of the hole, or both
Facing	A facing is fabric used to finish the raw edges of a garment such as at neckline and armhole
Gather	A technique for shortening the length of a strip of fabric so that the longer piece can be attached to a shorter piece
Hem	A piece of cloth (in sewing), a garment worker folds up a cut edge, folds it up again, and then sews it down. The process of hemming thus completely encloses the cut edge in cloth, so that it cannot ravel
Interfacing/ interlining	A common term for a variety of materials used on the unseen or "wrong" side of fabrics in sewing to reinforce fabric
Lining	An inner layer of fabric, fur, or other material that provides a neat finish; conceals seam allowances, interfacing, and construction details; and allows a garment to slip on and off easily
Pattern	An original garment from which other garments of a similar style are copied, or the paper or cardboard templates from which the parts of a garment are traced onto fabric before cutting out and assembling (sometimes called paper patterns)
Piping	A type of trim or embellishment consisting of a strip of folded fabric inserted into a seam to define the edges or style lines of a garment or other textile object
Placket	An opening in the upper part of trousers or skirts, or at the neck or sleeve of a garment Plackets allow clothing to be put on or removed easily
Pleat	A type of fold formed by doubling fabric back upon itself and securing it in place. It is commonly used in clothing and upholstery to gather a wide piece of fabric to a narrower

circumference

Seam	The line where two pieces of fabric are held together by thread
Seam allowances	Area between the edge of fabric and the stitching line on two (or more) pieces of material being stitched together
Stitch	A single turn or loop of the thread or yarn in sewing, knitting, and embroidery. All stitches made with a sewing needle with an "eye" or hole are variations on seven basic stitches: running stitch, backstitch, overcast stitch, cross stitch, buttonhole or blanket stitch, chain stitch
Trim	In clothing and home decorating is applied ornament such as gimp, ribbon, ruffles, or, as a verb, to apply such ornament
Twill tape	A flat twill-woven ribbon of cotton, linen, polyester, or wool

STANDARD PRACTICE

NATIONAL OCCUPATIONAL SKILLS STANDARD (NOSS) FOR

SEWING OPERATION

LEVEL 2

1. INTRODUCTION

Occupation Overview

Textiles and apparel are basic consumption items, in both developed and developing countries. The Malaysian textiles and apparel industry comprises of two main sectors. Those sectors are textiles and apparel, which include garment making and clothing accessories. The industry, especially clothing/apparel, is labour-intensive and requires skilled workers in the operation. From the official portal of Malaysia External Trade Development Corporation (MATRADE), the various made-in-Malaysia textile and apparel goods are jackets, overcoats, skirts, t-shirt, blouses, pants, undergarments, scarves, head gear (caps and hats) and textile accessories such as zippers, buttons, collars, cuffs, etc.

The industry insight sections stated that in Malaysia, the apparel sector has a long experience as producer of high end international brands. Such as Nike, Oshkosh, Burberry, Walt Disney, Puma, GAP, Ashworth and others under contract manufacturing arrangement. There are approximately 300 garment making companies supplying to domestic and export markets. These experiences have led to Malaysian apparel manufacturers emphasizing on design, production and high quality finishing. Various made in Malaysia apparels have gained international recognition for their quality, reliability and quick as well as prompt delivery. Malaysian apparels industry managed to sustain operation during the economic slowdown with minimal impact, thanks to continued demand for Malaysian made apparels due to the country's image as a reliable supplier. The mixed culture and international training/exposure of designers have enabled Malaysia to produce varied clothes suitable for all markets, from Asia, Europe to Middle East. (<http://www.matrade.gov.my/en/foriegn-buyers-section/69-industry-write-up-products/722-textiles-and-apparel->, 04/09/2014, 4.00pm).

Sewing operation is the backbone in apparel industry. The readymade garment manufacturing processing depends on some steps and techniques. In this document, the term use for industrial sewing is to describe the process available in factories to mass-produce a wide range of clothing and other goods that are created by sewing different components together along the course of a structured process. In order to make the mass production of sewn items as cost effective as possible, it is not unusual for the operation to make use of a series of industrial sewing machines that are configured to perform specific functions. Therefore this NOSS document which covers sewing operations in apparel manufacturing emphasizes on the specialized processes in garment constructions such as collar and sleeve cuff creation, assembly

of bodies cut pieces such as front and back bodice, sleeves, hem and bottom cover stitch.

With such development in apparel production in Malaysia as well as globally, the demand for the semi skilled workers such as sewing operators and its equivalence is very high. When the policy shift from import substitution to export oriented industrialization was promulgated in the Second Malaysia Plan (1971-1975), it led to the growth of the textiles and apparel industry.

In response to the requirements to develop flexible, dynamic and responsive NOSS package, and also to fulfil the needs in providing multi-tasking and multi skilling personnel in sewing operation for Level 2, a session was conducted to revise the current NOSS (TA-020-1, 2,3: 2011) which is developed in 2011.

This was due to the current demands for Sewing Operation personnel and the anticipated future demand for certification. It will also fulfil the apparel manufacturing industry requirements and also enhance and maintain the competency of the skilled personnel in the field of textiles and apparel. The NOSS document shall be used as a basis for training and assessment by training providers in Malaysia. With the demand of skilled workers, there is a need for the sewing industry to produce quality, professional, well-trained and certified personnel in apparel manufacturing to fill in the demand in the country. This is in line with the Ministry of Human Resources strategic initiatives in increasing high skill technical workforce towards transforming Malaysia as a high income nation and developed country in 2020.

For this level 2, the prerequisite for program enrolment into training centre is physically fit, can read/write and have basic knowledge about sewing machine will be an added advantage and comply with training centres terms and condition. For job employment purposes, the pre-requisite will follow the company requirements.

2. OCCUPATIONAL STRUCTURE

Sewing Operation (Level 2) personnel come under sub-sector Apparel Manufacturing. Figure 1.1 and 1.2 show the structured career path and job area of Sewing Operation (Level 2) personnel.

SECTOR	TEXTILE & APPAREL										
SUB SECTOR	APPAREL MANUFACTURING										
AREA	APPAREL PRODUCTION MANAGEMENT										
JOB AREA	SAMPLE ROOM		MARKER PLANNING	CUTTING SECTION			SEWING SECTION	FINISHING SECTION			
SUB AREA	PATTERN MAKING	SAMPLE MAKING		CUTTING	EMBROIDERY	PANEL PRINTING	SEWING SECTION	WASHING	IRONING	FOLDING	PACKING
LEVEL 5	APPAREL PRODUCTION MANAGER										
LEVEL 4	SAMPLE ROOM EXECUTIVE		MARKER PLANNING EXECUTIVE	APPAREL PRODUCTION EXECUTIVE							
LEVEL 3	PATTERN MAKER	SAMPLE MAKER SUPERVISOR	MARKER PLANNING SUPERVISOR	CUTTING SECTION PRODUCTION SUPERVISOR			SEWING SECTION SUPERVISOR	FINISHING PRODUCTION SUPERVISOR			
LEVEL 2	ASSISTANT PATTERN MAKER	SAMPLE MAKER	CADCAM OPERATOR	SENIOR CUTTING OPERATOR	EMBROIDERY SENIOR OPERATOR	PANEL PRINTING SENIOR OPERATOR	SEWING LINE LEADER	FINISHING LINE LEADER			
LEVEL 1	NO LEVEL	NO LEVEL	NO LEVEL	CUTTING OPERATOR	EMBROIDERY OPERATOR	PANEL PRINTING OPERATOR	SEWING OPERATOR	FINISHING OPERATOR			

Figure 1.1 Occupational Structures of Sewing Operation for Textile & Apparel Sector in Malaysia

Occupational Area Structure (OAS)

SECTOR	TEXTILE & APPAREL										
SUB SECTOR	APPAREL MANUFACTURING										
AREA	APPAREL PRODUCTION MANAGEMENT										
JOB AREA	SAMPLE ROOM		MARKER PLANNING	CUTTING SECTION			SEWING SECTION	FINISHING SECTION			
SUB AREA	PATTERN MAKING	SAMPLE MAKING		CUTTING	EMBROIDERY	PANEL PRINTING	SEWING SECTION	WASHING	IRONING	FOLDING	PACKING
LEVEL 5	APPAREL PRODUCTION MANAGER										
LEVEL 4	SAMPLE DEVELOPMENT SPECIALIST			APPAREL PRODUCTION EXECUTIVE							
LEVEL 3	SAMPLE MAKING SUPERVISION		MARKER PLANNING SUPERVISION	CUTTING OPERATION SUPERVISOR			SEWING OPERATION SUPERVISION	FINISHING OPERATION SUPERVISION			
LEVEL 2	SAMPLE MAKING OPERATION		CADCAM OPERATION	CUTTING OPERATION	EMBROIDERY OPERATION	PANEL PRINTING OPERATION	SEWING OPERATION	FINISHING OPERATION			
LEVEL 1	NO LEVEL	NO LEVEL	NO LEVEL				EMBEDDED TO LEVEL 2				

Figure 1.2 Occupational Area Structures of Sewing Operation for Textile & Apparel Sector in Malaysia

3. DEFINITION OF COMPETENCY LEVELS

3.1 Level of Competency and Definition Stipulated by JPK

The NOSS is developed for various occupational areas. Candidates for certification must be assessed and trained at certain levels to substantiate competencies. Below is a guideline of each NOSS Level as defined by the Department of Skills Development, Ministry of Human Resources, Malaysia.

Level 1:	Competent in performing a range of varied work activities, most of which are routine and predictable
Level 2:	Competent in performing a significant range of varied work activities, performed in a variety of contexts. Some of the activities are non-routine and required individual responsibility and autonomy.
Level 3:	Competent in performing a broad range of varied work activities, performed in a variety of contexts, most of which are complex and non-routine. There is considerable responsibility and autonomy and control or guidance of others is often required.
Level 4:	Competent in performing a broad range of complex technical or professional work activities performed in a wide variety of contexts and with a substantial degree of personal responsibility and autonomy. Responsibility for the work of others and allocation of resources is often present.
Level 5:	Competent in applying a significant range of fundamental principles and complex techniques across a wide and often unpredictable variety of contexts. Very substantial personal autonomy and often significant responsibility for the work of others and for the allocation of substantial resources features strongly, as do personal accountabilities for analysis, diagnosis, planning, execution and evaluation.

4. AWARD OF CERTIFICATE

The Director General shall award, to any person upon successful completion the NOSS programme shall be awarded Malaysian Skills Certificate / Sijil Kemahiran Malaysia (SKM) Level 2 in Sewing Operation.

- a) Malaysian Skills Certificate / Sijil Kemahiran Malaysia (SKM) Level 1, 2 & 3
- b) Malaysian Skills Diploma / Diploma Kemahiran Malaysia (DKM) Level 4
- c) Malaysian Skills Advanced Diploma / Diploma Lanjutan Kemahiran Malaysia (DLKM) Level 5
- d) Statement of Achievement / Penyata Pencapaian (PC)

No person shall be awarded a Certificate unless he / she satisfies the requirements set by Malaysian Skills Certification System.

5. OCCUPATIONAL COMPETENCIES

The Sewing Operation (Level 2) personnel must be competent in performing the following core competencies:

- Sewing Area Housekeeping And Preventive Maintenance
- Garment Pocket Attachment
- Garment Placket Attachment
- Garment Shoulder, Sleeves and Side Seam Attachment
- Collar And Sleeve Cuff Creation
- Collar, Sleeve Cuff And Label Sewing Operation
- Bottom And Sleeve Hem Sewing
- Pants Bodice Panel Attachment
- Skirt Bodice Panel Attachment
- Garment Accessories Sewing Operation

6. WORKING CONDITIONS

6.1 Working environment

Sewing Operation personnel typically works in standard shifts/normal operation hours, except when approaching deadlines that demand overtime. They work within normal working hours from morning to evening depending on the organisation's nature of business. They may be required to work extra hours to fulfil internal and external requirements from buyers such as garment production timeline. They may also be exposed to prolong sitting and leaning over sewing machine table. Most sewing operators carry out their work by themselves, although some interact with supervisors and other production staff.

6.2 Issues Related To Area of Work

Good health and stamina are important because these workers must sit for long hours. Prolong exposure to sitting and leaning over sewing machine/work station may cause

irritation, so special care of ergonomic position must be taken when working. Personnel in this field are also required to adhere to safety and security procedures as well as statutory/regulatory bodies' requirements in order to protect themselves and companies benefits.

7. EMPLOYMENT PROSPECTS

7.1 Malaysian Market

The textiles and textile products industry in Malaysia comprises four sub-sectors, namely primary textiles which cover activities such as polymerisation, spinning, weaving, knitting and wet processing; made-up garments; made-up textiles; and textile accessories. The growth of Malaysia's textiles and apparel industry accelerated in the early 1970s when the country embarked on export-oriented industrialisation. Due to the intensified global competition, Malaysia textile manufacturers are moving up the value chain by diversifying into the production of higher value-added textiles, implementing automation and computerised manufacturing processes, seeking business collaboration with foreign companies to acquire new technologies and undertaking research and development activities to develop new processes, new applications and value-added products. The industry currently employs more than 68,000 workers. (Source: Malaysian Investment Development Authority- MIDA)

In 2011, the industry was the 10th largest export earner, contributing approximately 2.3 per cent to Malaysia's total exports of manufactured goods. Exports of textiles and textile products for the year 2011 were RM10.8 billion while imports amounted to RM6.6 billion. The main export items were yarn, woven fabrics and apparels while imports were mostly yarn and woven fabrics. Malaysia's apparel manufacturers continue to maintain an excellent reputation for quality to meet high standards set by international brands owner such as Nike, Adidas, DKNY, Ann Taylor, Armani, Talbots, Puma, Asics, Levis and Tommy Hilfiger.

New growth areas in textiles industry have been targeted for promotion under the Third Industrial Master Plan (IMP3). The growth areas for the industry include industrial and home textiles, functional fabrics, high-end fabrics and garments, ethnic fabrics, and key support facilities and services such as design houses and fashion centres, specialized dyeing and finishing facilities..

There are excellent prospects in the private sector/company due to a shortage of hands-on experts in the sewing operation area. The same is also true in the public sector where this area seems to be currently experiencing a lack of professionals and well-experienced personnel. This area, thus, has a very good job market potential for skilled personnel due to a shortage of such highly skilled experts in this region.

Upon completion of the Competency Units (Core), other related occupations with respect to employment opportunities are:

- Embroidery Operator
- Sewing Operator
- Finishing Operator
- Sample Making Operator

Other related industries with respect to employment opportunities are:

- Automotive Industry (Product)
- Home Accessories

7.2 International Market

There is a potential for our personnel to work overseas by looking at the demands and trends of employment opportunities internationally. Subject to licensing in various countries, there is an opportunity to seek employment abroad.

8. TRAINING, INDUSTRIAL/PROFESSIONAL RECOGNITION, OTHER QUALIFICATIONS AND ADVANCEMENTS

Sewing operation personnel is a skilled profession and many sewing operators have to work from basic. As for career advancement, most competent sewing personnel develop their competency through real-world on-the-job situations. Trainees begin by observing and assisting experienced workers, sometimes in formal training programmes. They then advance to the more difficult tasks performed by experienced workers such as supervisory and management programmes.

9. SOURCES OF ADDITIONAL INFORMATION

9.1 National

- Malaysian Textile Manufacturers Association (MTMA)
C-9-4, Megan Avenue 1,
189 Jalan Tun Razak,
50400 Kuala Lumpur, Malaysia
Tel: +603-2162 1454 Fax:+603-21625148
Email: info@mtma.org.my
- Malaysian Textile and Apparel Centre (MATAC)
C-9-4, Megan Avenue 1,
189 Jalan Tun Razak,
50400 Kuala Lumpur, Malaysia
Tel: +603-2162 1454 Fax: +603-21625148
Email: secretariat@matac.com.my

- Malaysian Knitting Manufacturers Association (MKMA)
 12-1, Jalan Megat, 83000 Batu Pahat,
 Johor, Malaysia
 Tel: 607- 4343203
 Fax: 607 – 4314682
 Email: Rebecca@mkma.org
 Website: <http://www.mkma.org>

- Malaysia External Trade Development Corporation (MATRADE)
 Menara MATRADE, Jalan Khidmat Usaha, Off Jalan Duta
 50480 Kuala Lumpur, Malaysia
 Tel:+603-6207 7077 Fax:+603-6203 7037
 Email: info@matrade.gov.my
 Website: www.matrade.gov.my

- Ministry of International Trade and Industry (MITI)
 Block 10, Government Offices Complex, Jalan Duta,
 50622 Kuala Lumpur, Malaysia
 Tel:+603-80008000 Fax:603-62012337
 Email:webmiti@miti.gov.my

- Malaysian Investment Development Authority (MIDA)
 Block 4 Plaza Sentral Jalan Stesen, Sentral 5, 50470 Kuala Lumpur,
 Federal Territory of Kuala Lumpur, Malaysia
 +60 3-2267 3633

- Malaysia Production Corporation (MPC)
 Lorong Produktiviti, Off Jalan Sultan,
 46200 Petaling Jaya, Selangor Darul Ehsan. Malaysia
 Tel : 603 - 7955 7266 Fax : 603 - 7957 8068
 Email :marketing@mpc.gov.my

- Ministry of Domestic Trade, Co-operation Consumerism,
 Kementerian Perdagangan Dalam Negeri, Koperasi dan Kepenggunaan
 No 13, Persiaran Perdana,
 Presint 2, 62623 Putrajaya,
 Malaysia
 Tel: 603-8000 8000 Fax: 603-8882 5762

- Department of Occupational Safety and Health (DOSH)
 Ministry of Human Resources
 Level 2,3&4, Block D3, Complex D
 Federal Government Administrative Centre
 62530 W. P. Putrajaya
 Tel: 603-8886 5000 Fax: 603-8889 2443

9.1 International

- Asean Federation of Textile Industries (AFTEX)
Secretariat Office
C-9-4, Megan Avenue 1,
189 Jalan Tun Razak,
50400 Kuala Lumpur, Malaysia
Tel: +603-2162 1454 Fax: +603-21625148
Email: info@mtma.org.my
- The Academy of Fashion Profession (TaF.tc)
Central Plaza #14-06
298 Tiong Bahru Road
Singapore 168730
Tel: (65) 64759897 Fax: (65) 64753583
www.taftc.org
- Garment Manufacturer Association in Cambodia
No. 175 Jawahar Nehru Blvd (Street 215) Phnom Penh,
Kingdom of Cambodia
Tel: (855) 23-301 181 Fax: (855) 23-882 860
Email: info@gmac-cambodia.org
- Cotton Incorporated
488 Madison Avenue
New York, NY 10022-5702
Tel: (212) 4138300
Fax: (212) 4138377
- International Organization for Standardization
ISO Central Secretariat,
1, ch. de la Voie-Creuse, CP 56,
CH-1211, Geneva 20,
Switzerland
Tel: 41-22-749 01 11
Fax: 41-22-733 34 30
E-mail: central@iso.org
Web: <http://www.iso.org>
- International Labour Organisation (ILO)
4 route des Morillons,
CH-1211, Geneva 22,
Switzerland
Tel: 41-22-799-6111
Fax: 41-22-798-8685
Website: www.ilo.org
E-mail: ilo@ilo.org

10. ACKNOWLEDGEMENTS

The Director General of DSD would like to extend his gratitude to the organisations and individuals who have been involved in developing this standard.

This Standard has been proofread by a qualified personnel, named as follows;

Name (IC No.) : Nabilah Ooi Abdullah
Qualification : MEd, Open University Malaysia (OUM), BSc (Ed) Hons, University
Sains Malaysia (USM) & TESL (Certificate), Institut Bahasa

A draft of this Standard was circulated to the following list of companies for two weeks for validation and feedback:

- i. TPI Industries Sdn. Bhd.
- ii. Tai Wah Garments Industry Sdn. Bhd

This Standard has been checked by **the MATAC Coordinator, DSD and approved by the members of Skills Development Endorser Committee (SDEC) on 15th October 2014.**

The SDEC members listed bellow has reached a consensus on this standard.

- i. Ms Audra Chin
- ii. Encik Jamizal Bin Mohammad Zinul
- iii. Encik Rosli bin Mad Isa
- iv. Encik ShahifulNawar bin Ismail

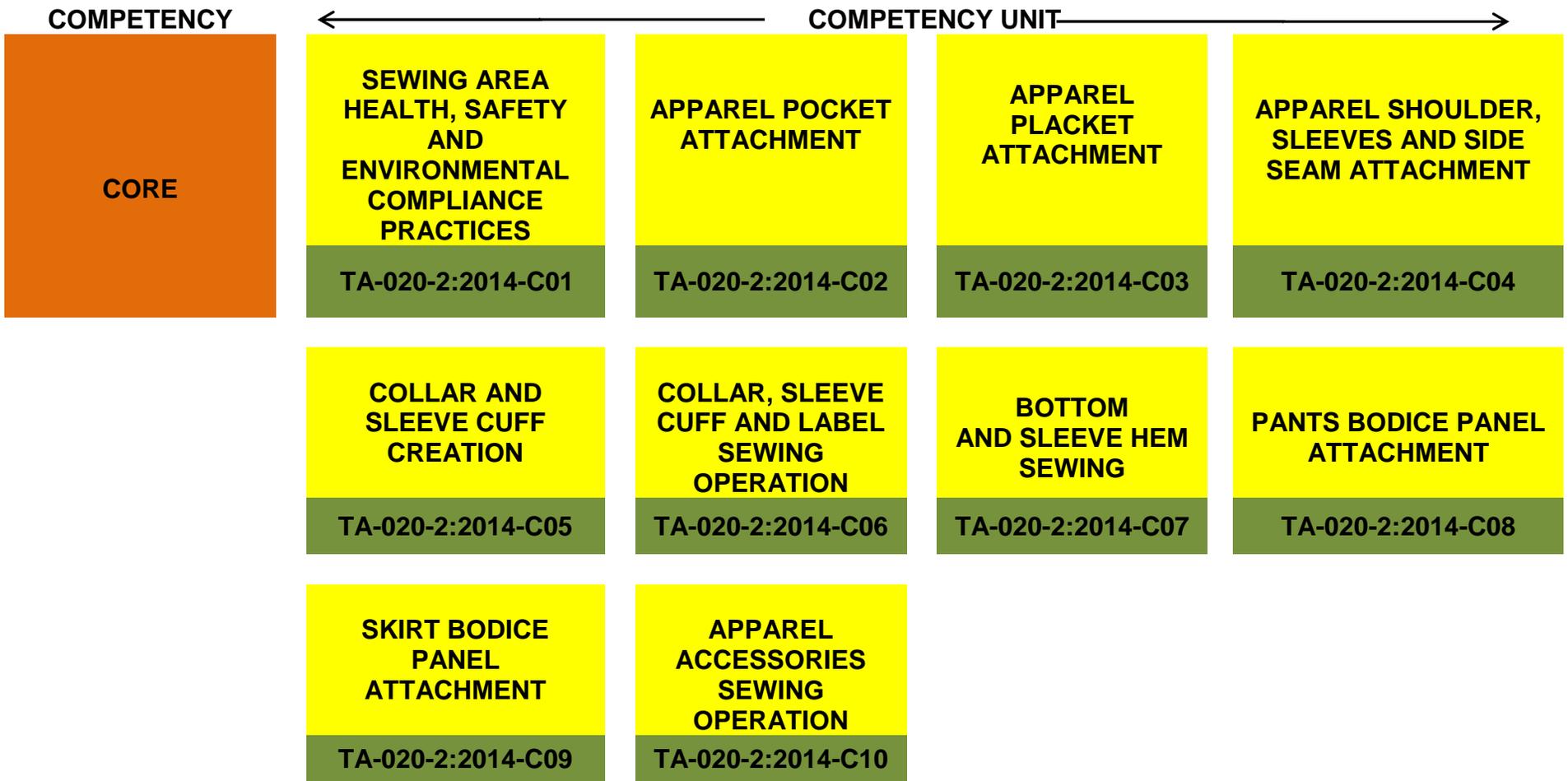
**11. COMMITTEE MEMBERS FOR DEVELOPMENT OF STANDARD PRACTISE (SP),
COMPETENCY PROFILE CHART (CPC), COMPETENCY PROFILE (CP) AND
CURRICULUM OF COMPETENCY UNIT (COCU)**

TA-020-2:2014- SEWING OPERATION – LEVEL 2

PANEL EXPERTS		
1.	Puan Lim Hwi Tin	Supervisor Honsin Apparel Sdn. Bhd. Segamat, Johor
2.	Puan Foo Fong Kwee	Sewing Industrial/ Trainer Honsin Apparel Sdn. Bhd. Segamat, Johor
3.	Puan Zaidah Bin Maskor	Supervisor Song Lin Garments Batu Pahat, Johor
4.	Puan Liam Bin Hoon	Supervisor Seven Star Enterprise Batu Pahat, Johor
5.	Puan Thong Kwai May	Supervisor Keenway Industries Sdn. Bhd. Kluang, Johor
6.	Puan Song Soon Ai	Sewing Operator Sub-Contractor (Sewing) Batu Pahat, Johor
7.	Puan Teo Geok Moi	Sewing Operator Sub-Contractor (Sewing) Batu Pahat, Johor
8.	Puan Chong Kim Tai	Trainer Malaysian Textile and Apparel Centre (MATAC) Batu Pahat, Johor
FACILITATOR		
1.	Puan Siti Salmah Binti Mohd Nor	HKN Consult Sdn. Bhd.

COMPETENCY PROFILE CHART (CPC)

SECTOR	TEXTILE & APPAREL		
SUB SECTOR	APPAREL MANUFACTURING		
JOB AREA	MASS PRODUCTION (SEWING SECTION)		
NOSS TITLE	SEWING OPERATION		
JOB LEVEL	TWO (2)	JOB AREA CODE	TA-020-2:2014



COMPETENCY PROFILE(CP)

Sub-Sector	APPAREL MANUFACTURING
Job Area	MASS PRODUCTION (SEWING SECTION)
NOSS Title	SEWING OPERATION
Level	TWO(2)

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
1. Sewing Area Health, Safety And Environment Compliance Practices	TA-020-2:2014-C01	<p>Sewing Area Health, Safety And Environment (HSE) Compliance Practices competency unit specifies the competency in complying sewing operations related to HSE. Activities comprises of practising good housekeeping and preventive maintenance of workstation and machineries as well as adherence to safety, health and environments requirements at sewing area/workplace. Definition of sewing area in this competency unit covers elements in apparel sewing activities such as work areas, facilities, machineries and environment.</p> <p>The person who is competent in health, safety and environment compliance practices should be able to comprehend work instructions in machine preventive maintenance, workplace organization, Occupational Safety, Health and Environment requirements and company Standard Operating (SOP).</p> <p>She/he should be able to prepare housekeeping and preventive maintenance requirements, check sewing workplace condition, carry out work area housekeeping and preventive maintenance, practise</p>	1. Prepare housekeeping and preventive maintenance requirements	<p>1.1 Sewing operation production details identified according to operation plan</p> <p>1.2 Machineries utilization schedule confirmed according to job order and production schedule</p> <p>1.3 Work area and sewing machines category identified according to preventive maintenance schedule</p> <p>1.4 Work instructions interpreted according to Standard Operating Procedure (SOP)</p> <p>1.5 Tools, equipment and materials to be used for preventive maintenance activities obtained and arranged</p> <p>1.6 Preventive maintenance records to be completed confirmed and interpreted according to job order</p> <p>1.7 Personal and occupational health and safety practices</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
		<p>health, safety and environment requirements and upkeep work area after operation.</p> <p>The outcome of this competency is to maintain sewing area and machineries condition and ensure all machineries and tools are well functioned and safe to be used, workplace arrangement as per work flow and health, safety and environment compliance is practised in accordance with company procedures.</p>	<p>2. Check sewing workplace condition</p>	<p>interpreted according to regulatory/statutory bodies requirements</p> <p>2.1 Work area condition visually inspected and safety confirmed for sewing operation according to Health, Safety and Environment regulations</p> <p>2.2 Tools and machine cleanliness and tidiness visually checked according to work organization method such as 5S</p> <p>2.3 Sewing machine specifications and functions identified according to machine manual</p> <p>2.4 Needle characteristic identified and selected based on various fabrics and type of apparel</p> <p>2.5 Sewing thread characteristic identified according to thread specifications</p> <p>2.6 Sewing machine driving and threading mechanism setting and functions confirmed according to machine operating manuals</p> <p>2.7 Material handling components condition and</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			3. Carry out work area housekeeping and preventive maintenance	<p>functions tested according to feeding mechanism (bottom feed/top feed)</p> <p>2.8 Malfunction/irregularities of preventive maintenance facilities, equipment and tools and sewing machine documented and reported to superior for further action</p> <p>3.1 Paper/cloth for checking oil leak on the needle plate checked and disposed according to disposal procedure</p> <p>3.2 Oil, dust and foreign materials cleaned and removed from sewing machine and work area according to cleaning procedure</p> <p>3.3 Damaged parts replaced/reported to superior for further action according to Standard Operating Procedure</p> <p>3.4 Various type of waste disposed according to disposal procedure and regulatory/statutory bodies requirements</p> <p>3.5 Used tool, equipment, material for preventive maintenance stored/kept in place according to work organization method</p> <p>3.6 Housekeeping and</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			<p>4. Practise health, safety and environment requirements</p>	<p>preventive maintenance job completeness confirmed according to reporting procedure and company policy.</p> <p>4.1 Personal health and safety requirements to be complied interpreted according to Occupational Safety, Health and Environment Acts.</p> <p>4.2 Machine safety components/ devices functionality tested and attached to machine according to machine manuals</p> <p>4.3 Bands specifications to attach sharp tools utilised according to safety requirements</p> <p>4.4 Machineries parts inclusive electrical components operated according to operation procedure and safety instructions</p> <p>4.5 Sewing tools utilised in safely manner according to safety instructions</p> <p>4.6 Sewing machine and electrical equipment safety procedure interpreted and followed strictly</p> <p>4.7 Waste disposal procedure interpreted and followed</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			5. Upkeep work area after operation	<p>according to Standard Operating Procedure</p> <p>5.1 All sewing machineries kept clean and switched off after operation according to machine operation manual</p> <p>5.2 Used sewing tool, equipment for sewing operation condition checked, documented and stored/kept in place according to work organization method and documentation procedure</p> <p>5.3 Unused sewing materials kept safely, returned to storage area and reported to superior according to company policy</p> <p>5.4 Various sewing waste disposed according to disposal procedure and regulatory/statutory bodies requirements</p> <p>5.5 Materials used for checking oil leak-placed on needle plate after working hours according to preventive maintenance work instructions.</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
				<p>according to safety requirements</p> <p>2.3 Right body posture (sitting position) kept securely and practiced according to ergonomic department requirements</p> <p>2.4 Work station/machine setting confirmed and chairs positions adjusted according to work flow and ergonomic department requirements</p> <p>2.5 Sewing machine components and functions setting confirmed and thread tension adjusted according to machine specifications and production specifications requirements</p> <p>2.6 Sewing tools and equipment functions ensured and organised according to work flow and safety requirements</p> <p>2.7 Materials for making pocket selected according to fabric type and pocket pattern design</p> <p>2.8 Materials and pocket cut piece arranged on workstation according to work flow and Standard Operating Procedure</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			<p>3. Fold pocket cut piece</p> <p>4. Carry out front bodice piece marking</p>	<p>3.1 Pocket specifications confirmed according to job specifications</p> <p>3.2 Fabric and soft paper organised and attached on correct side according to pocket specifications</p> <p>3.3 Pocket sample cardboard placement on the pocket cut piece confirmed according to pocket type</p> <p>3.4 Alignment accuracy of pocket opening with fabric edge confirmed according to pocket design</p> <p>3.5 Direction of folded edge pocket cut piece on sample cardboard followed according to folding method</p> <p>3.6 Folded edge neatness strengthened with ironing automatically/manually according to fabric type and temperature specifications</p> <p>3.7 Folded pocket finished appearance confirmed and corrective action made on misshape folded pocket</p> <p>4.1 Front bodice piece position on sewing table with correct side up confirmed according to apparel design and marking procedure</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			<p>5. Create apparel pocket opening</p>	<p>4.2 Marked cardboard/pocket shape hole at cardboard placed on the bodice piece according to marking method</p> <p>4.3 Pocket hole position alignment accuracy confirmed and adjusted according to measurement and marking method</p> <p>4.4 Pocket position marked with safe marking materials such as special washable ink marker/top stitch according to fabric type and texture</p> <p>4.5 Marking output visually checked according to pocket specifications</p> <p>5.1 Pocket opening design and specifications confirmed according to apparel specifications and job specifications</p> <p>5.2 Pocket opening creation procedure followed, method and technique applied according to pocket specifications</p> <p>5.3 Pocket bag and front apparel panel (for side, welt pocket) positions and alignment accuracy confirmed</p> <p>5.4 Pocket flaps/cover creation procedure</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			<p>6. Sew attached pocket cut piece</p>	<p>followed, method and technique (if applicable) applied according to pocket specifications</p> <p>5.5 Pocket opening size cut according to pocket specifications</p> <p>5.6 Top stitching and reverse stitching applied on attached pocket bag according to pocket design</p> <p>5.7 Pocket bag shape and opening visually checked and corrective action made on misshape folded pocket</p> <p>6.1 Folded pocket placement and direction confirmed on the marked position according to pocket placement method</p> <p>6.2 Accessories to be attached on pocket determined according to pocket specifications</p> <p>6.3 Folded pocket sewn according to sewing method and technique</p> <p>6.4 Pocket bag over locking and outside seaming carried out according to pocket design</p> <p>6.5 Pocket finished appearance confirmed according to job</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
				<p>specifications</p> <p>6.6 Finished pocket position measurement confirmed according to job order and apparel design</p> <p>6.7 Pocket defects visually checked, category identified and discrepancies/ defects reported to superior for further action (repair/rework) according to Standard Operating Procedure and Quality Standard requirements</p>
3. Apparel Placket Attachment	TA-020-2:2014-C03	<p>Apparel Placket Attachment competency unit specifies the competency in sewing apparel plackets in accordance with job specifications and Standard Operating Procedure (SOP). Plackets are defined as finished openings constructed in order to make it easy to put on or take off apparel.</p> <p>The person who is competent in apparel placket attachment should be able to comprehend the placket design, specifications, placket attachment procedure, method, technique and Standard Operating Procedure (SOP).</p> <p>She/he should be able to check placket attachment requirements, prepare placket attachment requirements, reinforce placket fabric, attach placket to bodice panel and sew attached placket.</p>	1. Check placket attachment requirements	<p>1.1 Job order information identified according to production schedule</p> <p>1.2 Job specifications interpreted according to job order and production approved sample</p> <p>1.3 Placket measuring data reviewed according to measuring manual</p> <p>1.4 Sewing method and technique identified according to job specifications, machine operating manual, and production approved sample</p> <p>1.8 Materials specifications identified according to job specifications</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
		<p>The outcome of this competency is to ensure the placket cut pieces are assembled, attached and sewn as per requirements, sewing technique and designs.</p>	<p>2. Prepare placket attachment requirements</p>	<p>1.5 Defects on materials identified according to quality standards</p> <p>1.6 Placket specifications identified according to apparel design and fabric type</p> <p>2.1 Personal hygiene and health requirements practised according to company policy</p> <p>2.2 Personal Protective Equipment (PPE) utilization confirmed according to safety requirements</p> <p>2.3 Right body posture (sitting position) kept securely and practiced according to ergonomic department requirements</p> <p>2.4 Work station/machine setting confirmed and chairs positions adjusted according to work flow and ergonomic department requirements</p> <p>2.5 Sewing machine components and functions setting confirmed and thread tension adjusted according to machine specifications and production specifications requirements</p> <p>2.6 Sewing tools and equipment functions</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			<p>3. Reinforce placket fabric</p> <p>4. Attach placket to bodice piece</p>	<p>ensured and organised according to work flow and safety requirements</p> <p>2.7 Materials for placket selected according to fabric type and apparel design</p> <p>2.8 Placket cut piece and reinforcement prepared and arranged on workstation according to work flow and Standard Operating Procedure</p> <p>3.1 Placket specifications confirmed according to job order</p> <p>3.2 Placket fabric and reinforcement materials specifications confirmed according to job order</p> <p>3.3 Placket reinforcement materials on fabric cut piece infused by hot pressing or sewn according to reinforcement method and materials type</p> <p>3.4 Shape and condition of reinforced placket fabric visually checked and measurement accuracy confirmed according to placket specifications</p> <p>4.1 Front bodice piece design (separated piece or single/combined piece)</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			5. Sew attached placket	<p>confirmed according to apparel design</p> <p>4.2 Placket attachment procedure followed, method and technique applied according to placket specifications</p> <p>4.3 Marking on front bodice created according to apparel design</p> <p>4.4 Right side of semi-finish placket placed accurately on the front bodice marked position</p> <p>4.5 Semi finished placket measurement confirmed according to job specifications</p> <p>5.1 Semi-finished placket sewn at the centre of marking based on placket type according to sewing method and technique</p> <p>5.2 Slit measurement at bodice neck confirmed, snipped and the corner stitched to form a triangle according to placket attachment method, design and fabric type</p> <p>5.3 Placket panel folded inside the front bodice piece and interfolded based on fabric and type of placket</p> <p>5.4 Attached placket sewn partially in sequence</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
				<p>(right, left and bottom) according to sewing method and technique</p> <p>5.5 Placket finished appearance confirmed according to job specifications</p> <p>5.6 Placket defects visually checked, category identified and discrepancies/ defects reported to superior for further action(repair/rework) according to Standard Operating Procedure and Quality Standard requirements</p>
4. Apparel Shoulder , Sleeves and Side Seam Attachment	TA-020-2:2014-C04	<p>Apparel Shoulder, Sleeves and Side Seam Attachment competency unit specifies the competency in joining front and back bodice pieces at shoulder area, sleeves at armhole and closing side seam in accordance with job specifications and Standard Operating Procedure (SOP).</p> <p>The person who is competent in apparel shoulder attachment should be able to comprehend the job specifications, attachment procedure, method, technique and Standard Operating Procedure (SOP).</p> <p>She/he should be able to prepare shoulder, sleeve and side seam attachment requirements, carry out shoulder attachment, carry out sleeve and side seam</p>	1. Prepare shoulder, sleeve and side seam attachment requirements	<p>1.1 Personal hygiene and health requirements practised and Personal Protective and Equipment (PPE) utilized according to company policy, safety and ergonomic department requirements</p> <p>1.2 Job order information identified according to production schedule</p> <p>1.3 Job specifications interpreted according to job order and production approved sample</p> <p>1.4 Sewing method and technique identified according to job</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
		<p>attachment and check shoulder, sleeve and side seam output.</p> <p>The outcome of this competency is to ensure the front and back bodice pieces and sleeves cut pieces are joint and sewn at shoulder parts, armhole and both side seams as per requirements and designs.</p>	<p>2. Carry out shoulder attachment</p>	<p>specifications, machine operating manual, and production approved sample</p> <p>1.5 Materials specifications identified according to job order</p> <p>1.6 Defects on materials identified according to quality standards</p> <p>1.7 Work station/machine setting confirmed and chairs positions adjusted according to work flow and ergonomic department requirements</p> <p>1.8 Sewing machine components and functions setting confirmed and thread tension adjusted according to machine specifications and production specifications requirements</p> <p>1.9 Sewing tools and equipment functions ensured and organised according to work flow and safety requirements</p> <p>1.10 Materials, shoulder/sleeve cut piece arranged on workstation according to work flow and Standard Operating Procedure</p> <p>2.1 Shoulder measuring data confirmed according to apparel specifications</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			<p>3. Carry out sleeve and side seam attachment</p>	<p>2.2 Shoulder design and specifications identified according to production approved sample</p> <p>2.3 Shoulder attachment procedure followed, method and technique applied according to job specifications</p> <p>2.4 Reinforcement materials utilised if applicable according to fabric type</p> <p>2.5 Bodice back piece specifications determined according to production approved sample</p> <p>2.6 Yoke and back pieces attachment procedure followed, method and technique applied according to bodice back piece specifications</p> <p>2.7 Apparel front and back bodice sides attached according to fabric specifications</p> <p>2.8 Front and back bodice shoulder sewn with/without reinforcement materials according to sewing technique</p> <p>3.1 Sleeve and side seam measuring data confirmed according to apparel specifications</p> <p>3.2 Front and back bodice</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
				<p>placement determined according to apparel specifications</p> <p>3.3 Side vent length measured and marked according to apparel type</p> <p>3.4 Right and left side vent measurement accuracy confirmed according to measuring specifications</p> <p>3.5 Sleeve cut piece placement on bodice piece confirmed according to job order</p> <p>3.6 Attached parts sewn according to sewing method, technique and apparel design (with/without gathers/dart/pleats)</p> <p>3.7 Front and back bodice piece placement and alignment confirmed and sewn partially based on measurement of side seam vent according to apparel design, sewing technique and machine specifications</p> <p>3.8 Side vent measurement accuracy confirmed according to apparel design</p> <p>3.9 Side vent position attached and interfolded according to side vent specifications</p> <p>3.10 Front and back bodice</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			<p>4. Check shoulder, sleeve and side seam output</p>	<p>topstitched in complete cycle according to side vent specifications</p> <p>3.11 Reverse-stitched on attached sleeve applied according to sewing technique and machine specifications</p> <p>4.1 Shoulder / sleeve and side seam finished appearance confirmed according to job specifications</p> <p>4.2 Upper front bodies on upper back bodice piece placement and alignment accuracy confirmed according to job specifications</p> <p>4.3 Right and left bodice of joint shoulder dimension accuracy measured according to job specifications</p> <p>4.4 Attached shoulder, sleeve and side seam defects visually checked, category identified and discrepancies/ defects reported to superior for further action(repair/rework) according to Standard Operating Procedure and Quality Standard requirements</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
5. Collar And Sleeve Cuff Creation	TA-020-2:2014-C05	<p>Collar And Sleeve Cuff Creation competency unit specifies the competency in creating collar and sleeve cuff in accordance with job specifications and Standard Operating Procedure (SOP).</p> <p>The person who is competent in collar creation should be able to comprehend the job specifications, creation procedure, method, technique and Standard Operating Procedure (SOP).</p> <p>She/he should be able to prepare collar and sleeve cuff creation requirements, carry out collar creation, carry out sleeve cuff creation and check collar and sleeve cuff output.</p> <p>The outcome of this competency is to ensure the collar and sleeve cuff are created and sewn as per requirements, sewing technique and designs.</p>	1. Prepare collar and sleeve cuff creation requirements	<p>1.1 Personal hygiene and health requirements practised and Personal Protective and Equipment (PPE) utilized according to company policy, safety and ergonomic department requirements</p> <p>1.2 Job order information identified according to production schedule</p> <p>1.3 Job specifications interpreted according to job order and production approved sample</p> <p>1.4 Sewing method and technique identified according to job specifications, machine operating manual, and production approved sample</p> <p>1.5 Materials specifications identified according to job specifications</p> <p>1.6 Defects on materials identified according to quality standards</p> <p>1.7 Work station/machine setting confirmed and chairs positions adjusted according to work flow and ergonomic department requirements</p> <p>1.8 Sewing machine components and functions setting confirmed and thread tension adjusted</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			2. Carry out collar creation	<p>according to machine specifications and production specifications requirements</p> <p>1.9 Sewing tools and equipment functions ensured and organised according to work flow and safety requirements</p> <p>1.10 Material for collar creation selected and arranged on workstation according to work flow and Standard Operating Procedure</p> <p>2.1 Collar specifications confirmed according to apparel specifications</p> <p>2.2 Reinforcement materials specifications determined based on fabric type</p> <p>2.3 Collar creation procedure followed according to collar specifications</p> <p>2.4 Folded fabric and interlining fixed together by ironed/hot pressed according to collar creation method</p> <p>2.5 Collar fabric and interlining materials alignment checked according to collar type</p> <p>2.6 Attached fabric at collar opening sewn according to sewing technique and collar specifications</p> <p>2.7 Attached collar</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			<p>3. Carry out sleeve cuff creation</p> <p>4. Check collar and sleeve cuff output</p>	<p>interfolded, creased and top stitched according to collar creation process</p> <p>3.1 Sleeve cuff specifications / measuring data confirmed according to apparel specifications</p> <p>3.2 Reinforcement materials specifications determined based on fabric type</p> <p>3.3 Sleeve cuff creation procedure followed according to sleeve cuff specifications</p> <p>3.4 Folded fabric and interlining fixed together by ironed/hot pressed according to sleeve cuff reinforcement method</p> <p>3.5 Alignment of fabric and interlining fabric checked and size confirmed according to sleeve cuff type</p> <p>3.6 Sleeve cuff sewn according to sewing technique and sleeve cuff specifications</p> <p>3.7 Attached fabric interfolded, creased and top stitched according to cuff creation process</p> <p>4.1 Collar and sleeve cuff finished appearances confirmed according to job specifications</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
				<p>4.2 Collar and sleeve cuff measurement and opening dimension ensured according to job order and apparel design</p> <p>4.5 Collar and sleeve cuff defects visually checked, category identified and discrepancies/ defects reported to superior for further action (repair/rework) according to Standard Operating Procedure and Quality Standard requirements</p>
6. Collar, Sleeve Cuff And Label Sewing Operation	TA-020-2:2014-C06	<p>Collar, Sleeve Cuff And Label Sewing Operation competency unit specifies the competency in attaching and sewing collar, sleeve cuff and label to apparel in accordance with job specifications and Standard Operating Procedure (SOP).</p> <p>The person who is competent in collar, sleeve cuff and label sewing should be able to comprehend the apparel design, job specifications, collar, sleeve cuff and label sewing technique and Standard Operating Procedure (SOP).</p> <p>She/he should be able to prepare sewing area and materials requirements, carry out collar and label sewing process, carry out sleeve cuff sewing process and check collar, label and sleeve cuff attachment output.</p> <p>The outcome of this competency is to</p>	1. Prepare sewing area and materials requirements	<p>1.1 Personal hygiene and health requirements practised and Personal Protective and Equipment (PPE) utilized according to company policy, safety and ergonomic department requirements</p> <p>1.2 Job order information identified according to production schedule</p> <p>1.3 Job specifications interpreted according to job order and production approved sample</p> <p>1.4 Work station/machine setting confirmed and chairs positions adjusted according to work flow and ergonomic department requirements</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
		ensure the collar, sleeve cuff and label are assembled, attached and sewn as per requirements, sewing technique and designs.	2. Carry out collar and label sewing process	<p>1.5 Sewing machine components and functions setting confirmed and thread tension adjusted according to machine specifications and production specifications requirements</p> <p>1.6 Sewing tools and equipment functions ensured and organised according to work flow and safety requirements</p> <p>1.7 Materials specifications identified according to job specifications</p> <p>1.8 Sewing materials arranged on workstation according to work flow and Standard Operating Procedure</p> <p>2.1 Collar and label measuring data confirmed according to apparel specifications</p> <p>2.2 Collar and label sewing procedure followed, method and technique applied according to job specifications, machine operating manual, and production approved sample</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			<p>3. Carry out sleeve cuff sewing process</p>	<p>2.3 Sewing points and line at left and right shoulder of collar, neck centre of bodice piece marked according to apparel design and fabric type</p> <p>2.4 Collar attachment (top stitch) at bodice neckline/ left placket point position fixed and sewn according to sewing method , technique and fabric type</p> <p>2.5 Attached semi-finished placket sewn completely according to sewing method and technique</p> <p>2.6 Label specifications confirmed according to apparel design</p> <p>2.7 Label attachment/insertion procedure followed, method and technique applied according to fabric type and customer requirements</p> <p>2.8 Label design and measurement confirmed according to apparel design</p> <p>3.1 Sleeve cuff specifications/ measuring data confirmed according to apparel specifications</p> <p>3.2 Sleeve cuff sewing procedure followed, method and technique applied according to job</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			<p>4. Check collar, label and sleeve cuff attachment output</p>	<p>specifications, machine operating manual, and buyer approved sample</p> <p>3.3 Cuff design and measurement confirmed according to apparel design</p> <p>3.4 Sewing marking points confirmed according to apparel design and fabric type</p> <p>3.5 Cuff stitched/ fixed at sleeve marking position confirmed and sewn according to sewing method , technique and fabric type</p> <p>4.1 Collar and labels finished appearance confirmed according to job specifications</p> <p>4.2 Collar and label position on bodice and dimension accuracy ensured according to job order, apparel design and quality standards requirements</p> <p>4.3 Sleeve cuff attachment finished appearances confirmed according to job specifications</p> <p>4.4 Collar, label and sleeve cuff defects visually checked, category identified and discrepancies/ defects reported to superior for</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
				further action according to Standard Operating Procedure and Quality Standard requirements
7. Bottom And Sleeve Hem Sewing	TA-020-2:2014-C07	<p>Bottom And Sleeve Hem Sewing competency unit specifies the competency in sewing bottom and sleeve hem in accordance with job specifications and Standard Operating Procedure (SOP).</p> <p>The person who is competent in bottom and sleeve hem sewing should be able to comprehend the job specifications, bottom and sleeve hem sewing technique such as cover stitching and Standard Operating Procedure (SOP).</p> <p>She/he should be able to check bottom and sleeve hem sewing requirements, prepare bottom and sleeve hem sewing requirements, sew bottom and sleeve hem and check bottom and sleeve hem output.</p> <p>The outcome of this competency is to ensure the apparel bottom and sleeve hem are sewn and sewing technique such as cover stitching applied as per requirements and designs.</p>	<p>1. Check bottom and sleeve hem sewing requirements</p> <p>2. Prepare bottom and sleeve hem sewing requirements</p>	<p>1.1 Job order information identified according to production schedule</p> <p>1.2 Job specifications interpreted according to job order and production approved sample</p> <p>1.3 Sewing method and technique identified according to job specifications, machine operating manual, and production approved sample</p> <p>1.4 Bottom and sleeve hem measuring data identified according to measuring manual</p> <p>1.5 Materials specifications identified according to job order</p> <p>1.6 Bottom and sleeve hem specifications identified according to production approved sample</p> <p>2.1 Personal hygiene and health requirements practised and Personal Protective and Equipment (PPE) utilized according to company policy, safety and ergonomic</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			3. Sew bottom and sleeve hem	<p>2.2 department requirements Work station/machine setting (arrangement, condition, height) confirmed and chairs positions adjusted according to work flow and ergonomic</p> <p>2.3 department requirements Sewing machine components and functions (needles, threads stands, bobbin, machine safety device-needle guard) setting confirmed and thread tension adjusted according to machine specifications and production specifications requirements (stitch per inch (SPI),speed)</p> <p>2.4 Sewing tools and equipment functions ensured and organised according to work flow and safety requirements</p> <p>2.5 Reinforcement materials (elastic/non elastic) arranged according to job order and apparel design</p> <p>3.1 Reinforcement materials (if applicable) attachment confirmed according to apparel design</p> <p>3.2 Fabric at bottom and sleeve parts folded inside according to job</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			<p>4. Check bottom and sleeve hem output</p>	<p>3.3 specifications Folded parts sewn according to sewing technique and machine specifications</p> <p>4.1 Bottom and sleeve hem finished appearance confirmed according to job specifications</p> <p>4.2 Bottom and sleeve hem measurement accuracy confirmed and discrepancies in measurement reported to supervisor for further action such as to be repaired/ reworked</p> <p>4.6 Bottom and sleeve hem defects visually checked, category identified and discrepancies/ defects reported to superior for further action(repair/rework) according to Standard Operating Procedure and Quality Standard requirements</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			3. Prepare pants fly	<p>chairs positions adjusted according to work flow and ergonomic department requirements</p> <p>2.3 Sewing machine components and functions setting confirmed and thread tension adjusted according to machine specifications and production specifications requirements</p> <p>2.4 Sewing tools and equipment functions ensured and organised according to work flow and safety requirements</p> <p>2.5 Materials selected according to fabric type and fly pattern design</p> <p>2.6 Front and back bodice, fly cut piece and materials arranged on workstation according to work flow and Standard Operating Procedure</p> <p>3.1 Fly specifications confirmed according to job order</p> <p>3.2 Fly fabric specifications (type, texture) and reinforcement materials specifications (fusible/infusible, hard fabric/interlining, dimension, texture) confirmed according to job</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			4. Sew pants fly	<p>order</p> <p>3.3 Reinforcement materials placed by sewing/hot pressing on fly fabric according to placket design and materials type</p> <p>3.4 Fly preparation procedure followed, method and technique applied according to pants specifications</p> <p>3.5 Shape and condition of reinforced fly fabric visually checked according to placket specifications</p> <p>4.1 Front bodice piece design confirmed according to apparel design</p> <p>4.2 Marking on front bodice created according to apparel design</p> <p>4.3 Right side of semi-finish fly placed accurately on the front bodice marked position</p> <p>4.4 Semi-finished fly measurement confirmed according to job order</p> <p>4.5 Fly position and direction determined according to pants design and users gender</p> <p>4.6 Semi-finished fly sewn at the centre of marking based on fly type according to sewing</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			5. Carry out pants bodice piece attachment	<p>method and technique</p> <p>4.7 Fly panel folded inside the front bodice piece and interfolded based on fabric and type of placket</p> <p>4.8 Attached fly sewn partially in sequence (right, left and bottom) according to sewing method and technique</p> <p>5.1 Back bodice piece preparation procedure followed, method and technique applied according to pants specifications</p> <p>5.2 Front and back bodice piece opening confirmed according to pants design</p> <p>5.3 Side seams and in seams closing procedure followed, method and technique applied according to pants specifications</p> <p>5.4 Label specifications and sewing position determined according to pants specifications</p> <p>5.5 Taping (if applicable) folder at sewing machine operated according to machine specifications</p> <p>5.6 Attached pants appearance confirmed according to job specifications</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			6. Carry out pants bottom hemming	<p>6.1 Pants bottom hemming procedure followed, method and technique applied according to pants specifications</p> <p>6.2 Bottom pants bodice folded accurately according to pants specifications</p> <p>6.3 Folded bottom interlocking/ blind stitching applied according to sewing technique, materials and machine specifications</p> <p>6.4 Finished bottom hem measurement tolerance confirmed within range according to job order and apparel specifications</p> <p>6.5 Bottom hem finished appearance confirmed according to job specifications</p> <p>6.6 Bottom hem defects visually checked, category identified and attached pants panels discrepancies/ defects reported to superior for further action (repair/rework) according to Standard Operating Procedure and Quality Standard requirements</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
9. Skirt Bodice Panel Attachment	TA-020-2:2014-C09	<p>Skirt Bodice Panel Attachment competency unit specifies the competency in sewing skirt bodices piece in accordance with job specifications and Standard Operating Procedure (SOP).This competency is part of skirt making process.</p> <p>The person who is competent in skirt bodice panel attachment should be able to comprehend the skirt design, specifications, skirt bodice attachment procedure, method, technique and Standard Operating Procedure (SOP).</p> <p>She/he should be able to check skirt bodice attachment requirements, prepare skirt bodice attachment requirements, attach skirt front and back bodice piece, carry out skirt creative artwork and decoration and check skirt bodice output.</p> <p>The outcome of this competency is to ensure the front and back skirt bodice pieces are assembled and sewn as per requirements and designs.</p>	<p>1. Check skirt bodice attachment requirements</p> <p>2. Prepare skirt bodice attachment requirements</p>	<p>1.1 Job order information identified according to production schedule</p> <p>1.2 Job specifications interpreted according to job order and production approved sample</p> <p>1.3 Skirt measuring data reviewed according to measuring manual</p> <p>1.4 Materials specifications identified according to job specifications</p> <p>1.5 Defects on materials identified according to quality standards</p> <p>1.6 Sewing method and technique identified according to job specifications, machine operating manual, and production approved sample</p> <p>1.7 Skirt specifications identified according to apparel design and fabric type</p> <p>2.1 Personal hygiene and health requirements practised and Personal Protective and Equipment (PPE) utilized according to company policy, safety and ergonomic department requirements</p> <p>2.2 Work station/machine setting confirmed and</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			<p>3. Attach skirt front and back bodice piece</p>	<p>chairs positions adjusted according to work flow and ergonomic department requirements</p> <p>2.3 Sewing machine components and functions setting confirmed and thread tension adjusted according to machine specifications and production specifications requirements</p> <p>2.4 Sewing tools and equipment functions ensured and organised according to work flow and safety requirements</p> <p>2.5 Decoration specifications identified according to measuring manual and skirt design</p> <p>2.6 Art specifications confirmed according to production approved sample</p> <p>2.7 Seam allowances determined according to skirt parts specifications</p> <p>2.8 Materials arranged on workstation according to work flow and Standard Operating Procedure</p> <p>3.1 Skirt front and back bodice piece preparation procedure followed, method and technique applied according to skirt</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			<p>4. Carry out skirt creative artwork and decoration</p>	<p>specifications</p> <p>3.2 Front and back bodice piece measurement confirmed according to skirt design</p> <p>3.3 Gather/darts/pleats placement and measurement confirmed and sewn according to skirt design and sewing technique</p> <p>3.4 Side seams closing procedure followed, method and technique applied according to skirt specifications</p> <p>3.5 Bottom hemming/over locking applied according to job specifications</p> <p>3.6 Label and sewing position determined according to pants specifications</p> <p>4.1 Creative artwork and decoration measurement determined according to skirt specifications</p> <p>4.2 Artwork and decoration requirements confirmed according to production approved sample</p> <p>4.3 Skirt creative artwork and decoration procedure followed, method and technique applied according to skirt specifications</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			5. Check skirt bodice output	<p>4.4 Decorative materials placement and alignment on marking confirmed and sewn according to sewing technique and skirt design</p> <p>5.1 Skirt finished appearance confirmed according to job specifications</p> <p>5.2 Measurement tolerance confirmed within range according to skirt specifications</p> <p>5.3 Skirt defects visually checked, category identified and discrepancies/ defects reported to superior for further action(repair/rework) according to Standard Operating Procedure and Quality Standard requirements</p>
10. Apparel Accessories Sewing Operation	TA-020-2:2014-C10	<p>Apparel Accessories Sewing Operation competency unit specifies the competency in creating and sewing suitable accessories/fasteners such as waistband, zippers, buttons and eyelet on apparel bodice pieces in accordance with job specifications and Standard Operating Procedure (SOP).</p> <p>The person who is competent in apparel accessories sewing operation should be able to comprehend the accessories design, specifications, apparel accessories sewing</p>	1. Prepare apparel accessories sewing operation requirements	<p>1.1 Work area, personal hygiene, health and safety confirmed according to Occupational Safety and Health requirements</p> <p>1.2 Job order information identified according to production schedule</p> <p>1.3 Job specifications interpreted according to job order and production approved sample</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
		<p>technique and Standard Operating Procedure (SOP).</p> <p>She/he should be able to prepare apparel accessories sewing operation requirements, create waistband, attach zipper, create button hole, attach button, create eyelet hole and attach eyelet.</p> <p>The outcome of this competency is to ensure the apparel accessories such as waistband, zippers, buttons and eyelet are created, attached and sewn as per requirements, sewing technique and designs.</p>	<p>2. Create waistband</p>	<p>1.4 Materials specifications identified according to job order</p> <p>1.5 Defect on materials identified according to quality standards</p> <p>2.1 Waistband specifications identified and confirmed according to job order</p> <p>2.2 Sewing machine, parts, tools and equipment setting confirmed and thread tension adjusted according to machine specifications, sewing method and safety requirements</p> <p>2.3 Readymade waistband prepared (unfold/unroll) and organised according to waistband specifications and job order</p> <p>2.4 Waistband preparation and attachment procedure followed, method and technique applied according to waistband specifications</p> <p>2.5 Sample of waistband sewn for testing according to fabric type, waist size and sewing technique</p> <p>2.6 Waistband edge joint and top stitching applied according to machine specifications</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			3. Attach zipper	<p>2.7 Completed waistband appearance and size/ measurement accuracy confirmed according to waistband specifications</p> <p>2.8 Waistband defects visually checked, category identified and discrepancies/ defects reported to superior for further action(repair/rework) according to Standard Operating Procedure and Quality Standard requirements</p> <p>3.1 Zipper specifications confirmed and selected according to job order and apparel design</p> <p>3.2 Sewing machine, parts, tools and equipment setting confirmed, functions tested and thread tension adjusted according to machine specifications, sewing method and safety requirements</p> <p>3.3 Variety types of zip foot selected according to fabric type and apparel specifications</p> <p>3.4 Zipper attachment procedure followed, method and technique applied according to job</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			4. Create button hole	<p>specifications</p> <p>3.5 Zipper appearance, functionality and placement accuracy confirmed according to job specifications</p> <p>3.6 Attached Zipper defects visually checked, category identified and discrepancies/ defects reported to superior for further action(repair/rework) according to Standard Operating Procedure and Quality Standard requirements</p> <p>4.1 Button specifications confirmed according to job order</p> <p>4.2 Button hole specifications confirmed according to job order</p> <p>4.3 Button hole machine, parts, tools and equipment setting confirmed and functions tested according to machine specifications, button hole specifications and safety requirements</p> <p>4.4 Marking of hole gap at machine ensured according to button gap measurement</p> <p>4.5 Button hole machine operated according to</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			5. Attach button	<p>machine manuals and Standard Operating Procedure</p> <p>4.6 Button hole appearance confirmed according to job specifications</p> <p>4.7 Button hole defects visually checked, category identified and discrepancies/ defects reported to superior for further action(repair/rework) according to Standard Operating Procedure and Quality Standard requirements</p> <p>5.1 Button specifications confirmed according to job specifications</p> <p>5.2 Button hole specifications confirmed according to job specifications</p> <p>5.3 Button machine, parts, tools and equipment setting confirmed, functions tested and thread tension adjusted according to machine specifications, sewing method and safety requirements</p> <p>5.4 Button place marking accuracy and alignment of hole at button confirmed according to button sewing method</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			6. Create eyelet hole	<p>5.5 Button machine operated according to machine operation manuals and Standard Operating Procedure</p> <p>5.6 Button appearance, functionality and placement accuracy confirmed according to machine and button specifications</p> <p>5.7 Button defects visually checked, category identified and discrepancies/ defects reported to superior for further action(repair/rework) according to Standard Operating Procedure and Quality Standard requirements</p> <p>6.1 Eyelet specifications confirmed according to job order</p> <p>6.2 Eyelet hole specifications confirmed according to job specifications</p> <p>6.3 Eyelet hole machine, parts, tools and equipment setting confirmed and functions tested according to machine specifications, eyelet hole specifications and safety requirements</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
			7. Attach eyelet	<p>6.4 Marking of hole gap at machine ensured according to eyelet gap measurement</p> <p>6.5 Eyelet hole machine operated according to machine operation manuals and Standard Operating Procedure</p> <p>6.6 Eyelet hole appearance confirmed according to job specifications</p> <p>6.7 Eyelet hole defects visually checked, category identified and discrepancies/ defects reported to superior for further action(repair/rework) according to Standard Operating Procedure and Quality Standard requirements</p> <p>7.1 Eyelet specifications confirmed according to job order</p> <p>7.2 Eyelet machine, parts, tools and equipment setting confirmed and functions tested according to machine specifications, eyelet specifications and safety requirements</p> <p>7.3 Eyelet base/washer and ring specifications confirmed and selected according to job</p>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
				<p>7.4 specifications Eyelet base/washer positioning and setting confirmed according to eyelet machine specifications</p> <p>7.5 Eyelet machine operated according to machine operation manuals and Standard Operating Procedure</p> <p>7.6 Eyelet appearance, functionality and placement accuracy confirmed according to job specifications</p> <p>7.7 Attached eyelet defects visually checked, category identified and discrepancies/ defects reported to superior for further action(repair/rework) according to Standard Operating Procedure and Quality Standard requirements</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> ii. Sewing areas/location such as: <ul style="list-style-type: none"> • Sewing floor/lines/room • Sewing workstation/tables • Sample room iii. Sewing machines types such as: <ul style="list-style-type: none"> • Lockstitch • Overlock • Cover stitch • Interlock • Button hole • Buttoning • Snap button • Eyelet hole • Button sewing • Bartack • Zig-zag/ Embroidery sewing • Chain stitch iv. Work instructions such as: <ul style="list-style-type: none"> • Lint, dust and trash removal • Hook of lockstitch machines blown off • Machines lubrication: <ul style="list-style-type: none"> ○ Oil level in the machines ○ Oil is not contaminated 	<ul style="list-style-type: none"> preventive maintenance vi. Determine relevant documents in sewing operation for references or to be completed vii. Identify regulatory/statutory bodies 	<p>locating tools, equipment and materials</p> <p><u>Attitude:</u></p> <ul style="list-style-type: none"> i. Wear Personal Protective Equipment (PPE) when handling job 			<ul style="list-style-type: none"> and functions described according to production requirements iv. Work instructions defined v. Tools, equipment and materials for housekeeping and preventive maintenance organised according to work instructions vi. Relevant documents in sewing operation for references or to be completed explained vii. Regulatory/ statutory bodies listed

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Sewing machine needle inspection signs of wear or damage • Machine systems: <ul style="list-style-type: none"> ○ Thread handling ○ Feed system ○ Materials trimming ○ Folders and guides v. Tools, equipment and materials for housekeeping and preventive maintenance such as: <ul style="list-style-type: none"> • Vacuum • Blower • Soft bristle brush • Magnet Bar • Cloth • Personal Protective Equipment (PPE) vi. Relevant documents in sewing operation for references or to be completed such as: <ul style="list-style-type: none"> • Job order: <ul style="list-style-type: none"> ○ schedule maintenance, ○ area/location /line to be maintained 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Standard Operating Procedure (SOP) • Machines manuals • Sewing machine • Industrial Sewing Machine Safety Rules and Regulations • Housekeeping and preventive maintenance records: <ul style="list-style-type: none"> ○ Checklist ○ Log book ○ Preventive maintenance flow chart vii. Regulatory/statutory bodies such as: <ul style="list-style-type: none"> • Department of Safety and Health (DOSH) - Occupational Health, Safety and Environmental Acts • Department of Environments (DOE) • SIRIM • Quality Standards Authorised bodies • Local Council • Third party provider (Insurance) 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
2. Check sewing workplace condition	i. Health, Safety and Environment requirements such as: <ul style="list-style-type: none"> • Personal Protective Equipment (PPE) (gloves, mask, safety boots, goggles, earplug, apron) • Workplace and personal safety • Housekeeping ii. Sewing operation process such as: <ul style="list-style-type: none"> • Pocket attachment • Placket attachment • Collar Creation • Sleeves Attachment • Bodice attachment • Embroideries sewing iii. Work area condition requirements such as: <ul style="list-style-type: none"> • Clean environment • Conducive atmosphere (air ventilation, lights) • Tidy arrangement • Electric cable properly tied and covered iv. Work organization method such as “5S”: <ul style="list-style-type: none"> • Sort (Tidiness) • Set In Order 	i. Interpret Health, Safety and Environment requirements ii. Determine sewing operation process iii. Determine work area condition requirements iv. List elements to be inspected v. Check paper/cloth for checking oil leaking conditions vi. Identify various types of fabric vii. Determine types of garment viii. Determine stitching requirements ix. Test sewing machine components setting and functions x. Check material handling components condition and function xi. Interpret Machine Operation Manual xii. Identify type of malfunction/irregularities matters xiv. Document sewing workplace condition results	<u>Attitude:</u> <ol style="list-style-type: none"> i. Always having alert mind when checking workplace condition ii. Particular on signs and symptoms of irregularities on machineries iii. Adhere to quality standards requirements iv. Always practice good housekeeping inclusive personal hygiene <u>Safety:</u> <ol style="list-style-type: none"> i. Wear PPE during operations ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area <u>Environmental:</u> <ol style="list-style-type: none"> i. Hazardous chemical kept in ventilated room/area 	<u>Related Knowledge</u> 1 <u>Related Skill</u> 3	<u>Related Knowledge</u> Lecture Question and Answer <u>Related Skill</u> Demonstration Observation	i. Health, Safety and Environment requirements defined ii. Sewing operation process differentiated iii. Work area condition requirements categorised iv. Work organization method such as “5S” listed and purpose defined v. Elements to be inspected specified vi. Oil leak checking method applied vii. Various types of fabric listed according to garment specifications viii. Types of garments categorized ix. Stitching requirements such as needle

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>(Orderliness)</p> <ul style="list-style-type: none"> • Shine (Cleanliness) • Standardize (Standardization) • Sustain (Discipline) <p>v. Elements to be inspected such as:</p> <ul style="list-style-type: none"> • Sewing machine types and functions • Sewing tools and equipment • Cleanliness and tidiness • Oil leaking • Dust /foreign materials such as: <ul style="list-style-type: none"> ○ broken needles ○ excess fabrics/thread • Significant aspects of sewing: <ul style="list-style-type: none"> ○ thread tension and consumption ○ presser foot displacement and compressing force ○ needle penetration force measurement <p>vi. Paper/cloth for</p>		<p>ii. Adhere to environmental procedures when handling hazardous chemical/additive materials</p>			<p>specifications selection and sewing thread characteristic described according to garment specifications</p> <p>x. Sewing machine components setting and functions checking demonstrated according to Machine Operating Manual</p> <p>xi. Types of malfunction/irregularities matters listed and described</p> <p>xii. Sewing workplace condition results recorded according to documentation procedure</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>checking oil leak conditions</p> <p>vii. Various types of fabrics such as:</p> <ul style="list-style-type: none"> • Faber • Satin • Cotton • Linen <p>viii. Types of garment such as:</p> <ul style="list-style-type: none"> • Shirts, blouses, dresses • Pants/Trouser • Skirts <p>ix. Stitching requirements such as:</p> <ul style="list-style-type: none"> • Needle specifications selection: <ul style="list-style-type: none"> ○ Structure (butt, shank, shoulder, blade, long groove, eye, point, tip) ○ Sizing systems (metric, singer, imperial) ○ Type of point (round point, light ball, medium ball, heavy ball) • Sewing thread characteristic 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> x. Sewing machine components setting and functions such as: <ul style="list-style-type: none"> • Driving mechanism <ul style="list-style-type: none"> ○ bobbin cases ○ rotary hooks/shuttles • Threading mechanism • Material handling components: <ul style="list-style-type: none"> ○ materials ○ presser foot ○ needle plate, ○ feed dog xi. Machine Operation Manual xii. Types of malfunction/irregularities matters: <ul style="list-style-type: none"> • Broken • Wear and tear • Missing xiii. Sewing workplace condition results to be documented and reported: <ul style="list-style-type: none"> • Equipment and tools used for preventive maintenance status • Sewing machine condition and functions • Type of malfunction/irregularities 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> Documentation procedure 					
3. Carry out work area housekeeping and preventive maintenance	<ul style="list-style-type: none"> i. Housekeeping and preventive maintenance schedule such as: <ul style="list-style-type: none"> Before operation During operation break time After operation ii. Paper/cloth for checking oil leaking conditions iii. Work area housekeeping procedure: <ul style="list-style-type: none"> Cleaning Waste disposal iv. Machineries preventive maintenance procedure such as: <ul style="list-style-type: none"> Cleaning (oil/dust/foreign materials) Waste disposal Broken parts replacement with superior consent v. Action to be taken on damaged parts: <ul style="list-style-type: none"> Replacement Reported to superior for further action 	<ul style="list-style-type: none"> i. Determine housekeeping and preventive maintenance schedule ii. Dispose paper/cloth for checking oil leaking conditions iii. Execute work area housekeeping iv. Execute machineries preventive maintenance v. Execute action to be taken on damaged parts vi. Keep used tools, equipment and materials after housekeeping and maintenance vii. Apply relevant procedures in preventive maintenance 	<p><u>Attitude:</u></p> <ul style="list-style-type: none"> i. Detailed and thorough in executing housekeeping and preventive maintenance ii. Objective driven to complete assigned works iii. Adhere to quality standards requirements iv. Always practice good housekeeping inclusive personal hygiene <p><u>Safety:</u></p> <ul style="list-style-type: none"> i. Wear PPE during operations ii. Adhere to safety requirements in executing housekeeping and preventive maintenance activities 	<p><u>Related Knowledge</u></p> <p>6</p> <p><u>Related Skill</u></p> <p>14</p>	<p><u>Related Knowledge</u></p> <p>Lecture Question and Answer Group Discussion</p> <p><u>Related Skill</u></p> <p>Demonstration Observation</p>	<ul style="list-style-type: none"> i. Housekeeping and preventive maintenance schedule specified ii. Paper/cloth for checking oil leak conditions differentiated according to problems category iii. Maintenance procedure followed iv. Action to be taken on damaged parts demonstrated according to scope of maintenance allowed v. Designated locations/ areas for keeping used tools, equipment and materials specified vi. Relevant

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> tools (tweezers, scissors) <ul style="list-style-type: none"> ○ belts and wheels ○ Electric cables properly tied and covered ii. Band specifications to attach sharp tools such as: <ul style="list-style-type: none"> ● Elastic/Non-elastic ● Length iii. Machineries parts under safety precaution such as : <ul style="list-style-type: none"> ● Pedal and knee lifter ● Electrical components iv. Handling procedure on utilization of sharp sewing tools v. Sewing machine and electrical equipment safety instructions such as: <ul style="list-style-type: none"> ○ Sewing machine and electrical equipment switched off ○ Keep drinks water away from area – preventing electric shocks/ 	<p>health, safety and environmental Procedure</p>	<p><u>Safety:</u></p> <ul style="list-style-type: none"> i. Adhere to safety rules and regulations ii. Follow handling procedure on utilization of sharp sewing tools iii. Always practice good housekeeping inclusive personal hygiene <p><u>Environmental:</u></p> <ul style="list-style-type: none"> i. Adhere to environmental requirements 			<ul style="list-style-type: none"> safety precaution defined ii. Utilization of sharp sewing tools demonstrated according to safety requirements iii. Sewing machine and electrical equipment safety instructions followed according to company safety procedure

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>vi. damage to machine Company health, safety and environmental procedure such as:</p> <ul style="list-style-type: none"> • Display safety guidelines at machine • Safety signage labels • Emergency action flow charts 					
5. Upkeep work area after operation	<p>i. Designated storage area/place for storing/keeping :</p> <ul style="list-style-type: none"> • Used tool, equipment and materials • Unused/balance of sewing balance materials (threads, tape, accessories) <p>ii. Handling procedures of damaged parts and waste materials such as:</p> <ul style="list-style-type: none"> • Damaged parts: <ul style="list-style-type: none"> ○ Repack, labelled and keep ○ Return controlled items to superior/store 	<p>i. Locate designated storage area/place for storing/keeping</p> <p>ii. Repack/label/keep damaged parts and waste materials</p> <p>iii. Return controlled damaged parts to superior/store</p> <p>iv. Determine waste category</p> <p>v. Place Oil leaking paper/cloth on needle plate</p> <p>vi. Update superior on work area and machineries status after operation</p>	<p><u>Attitude:</u></p> <p>i. Thorough in up keeping work station</p> <p>ii. Adhere to quality standards requirements</p> <p>iii. Always practice good housekeeping inclusive personal hygiene</p> <p><u>Safety:</u></p> <p>i. Adhere to safety rules and regulations</p> <p>ii. Follow handling procedures of damaged parts and waste materials</p>	<p><u>Related Knowledge</u></p> <p>1</p> <p><u>Related Skill</u></p> <p>4</p>	<p><u>Related Knowledge</u></p> <p>Lecture Question and Answer Group Discussion</p> <p><u>Related Skill</u></p> <p>Demonstration Observation</p>	<p>i. Designated storage area/place for storing/keeping specified</p> <p>ii. Damaged parts and waste materials handling procedure demonstrated</p> <p>iii. Waste category categorised</p> <p>iv. Oil leak checking method applied according to maintenance requirements</p> <p>v. Work area</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Waste: <ul style="list-style-type: none"> ○ Labelled, recycled/ disposed iii. Waste category such as: <ul style="list-style-type: none"> • General/ consumable items • industrial (scheduled/ hazardous) iv. Oil leak checking method: <ul style="list-style-type: none"> • Placement cloth/paper on needle plate after working hours • Visual check at machine components v. Work area and machineries status after operation vi. Organization Chart/Hierarchy vii. Standard Operating Procedure 					<p>and machineries status (condition and functions) informed to superior according to Standard Operating Procedure and Organization Chart/ Hierarchy</p> <p>vi. Work area , personal hygiene, Health, Safety, Environments (HSE) requirements and good housekeeping practised at all time</p>

Employability Skills

Core Abilities	Social Skills
<ul style="list-style-type: none"> 01.01 Identify and gather information 01.02 Document information, procedures or processes 01.04 Analyze information 01.06 Utilize word processor to process information 02.01 Interpret and follow manuals, instructions and SOP's 02.03 Communicate clearly 02.04 Prepare brief reports and checklists using standard forms 03.01 Apply cultural requirements to the workplace 03.02 Demonstrate integrity and apply ethical practices 03.03 Accept responsibility for own work and work area 03.05 Demonstrate safety skills 03.06 Respond appropriately to people and situations 04.01 Organize own work activities 04.02 Set and revise own objectives and goals 04.03 Organize and maintain own workplace 04.05 Demonstrate initiative and flexibility 	<ul style="list-style-type: none"> 1. Communication skills 2. Conceptual skills 3. Interpersonal skills 4. Learning skills 5. Leadership skills 6. Multitasking and prioritising 7. Self-discipline 8. Teamwork

Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. Sample of sewing operation documentations (Job order sheet, Standard Operating Procedure (SOP), production schedule, maintenance schedule, audit schedule, work instructions, housekeeping/preventive maintenance records, safety procedures)	1:1
2. Work station/table with adjustable chairs	1:5
3. Various types of sewing machine (Lockstitch, Overlock, Cover stitch, Interlock, Button hole, Buttoning ,Snap button, Eyelet hole,Button sewing, Bartack, Chain stitch, Zig-zag/ Embroidery sewing, etc)	1:5
4. Sewing machine component (needles, threads stands, bobbin, bobbin case, machine safety devices (needle guard, wheel/belt cover))	1:5
5. Sample of Machine Operation Manual	1:25
6. Tools, equipment and materials for housekeeping/ preventive maintenance (paper/cloth,vacuum, blower, soft bristle brush, magnet	1:25

bar, oil for machines,etc)	
7. Personal Protective Equipment (safety mask, glove, goggle, hair cover/cap, apron, ear plug, etc)	1:1
8. Sample of garment (shirts, blouses, dresses, pants, skirts)	1:25
9. Sample of fabrics	As per required
10. Sewing materials (threads, tape, interlining,etc)	As per required
11. Sewing tools (tweezers, scissors/shears, measuring tape) and equipment (iron/ ironing table/hot press)	1:25
12. Quality Standards references, manuals and procedures	1:1

REFERENCES

1. Betsy Hosegood eds. (2006), Complete of Sewing, Darling Kindersley Limited London, ISBN 13, 978-1-4053-1295-0
2. Claire Shaeffer, Sewing for the Apparel Industry (2nd Edition), (2012), ISBN 978-0131884434
3. Clifford L Blodget (2013), The Sewing Machine Master Guide: From Basic to Expert, Blodget Publishing, LLC, ISBN 978-0-9900227-2-5
4. Denham, Carolyn (2014), Elementary Sewing Skills from Merchant & Mills, Collins & Brown, ISBN 9781909397415
5. Dorothy Wood (2002) Sewing Skills & Techniques, Lorenz Books, ISBN 878-923160800-0
6. E. Drudi (2002) Figure Drawing For Fashion Design, Pepin Press Publisher, ISBN 978-9054960805
7. Janine Manslow Kathryn McIelvey, 2002, Fashion Design Process, Innovation & Practice- Blackwell ISBN 0-632-05599-5
8. Maurice J. Johnson, Evelyn C. Moore (2001), Apparel Product Development, Second Edition, Prentice Hall, New Jersey, ISBN 0-13-025439-8
9. Myra Coles (1999), The Sewing Machine Book, Hutchinson and Co. (Publishers) Ltd, ISBN 0-09-173009-0
10. Pati palmer, Gail Brown, (2004), Sewing with Sergers: The Complete Handbook for Overlock Sewing (Serging . . . from Basics to Creative Possibilities series), A Palmer/Pletsch Publication ISBN 978 0935278255
11. Phyllis G. Tortora, Robert S. Merkel (2007), Fairchilds's Dictionary of Textiles, 7th Edition, Fairchild Publications New York, ISBN 1-87005-707-3

CURRICULUM of COMPETENCY UNIT (CoCU)

SECTOR		TEXTILE & APPAREL						
SUB SECTOR		APPAREL MANUFACTURING						
JOB AREA		MASS PRODUCTION (SEWING SECTION)						
NOSS TITLE		SEWING OPERATION						
COMPETENCY UNIT TITLE		APPAREL POCKET ATTACHMENT						
LEARNING OUTCOME		<p>The person who is competent in this competency unit shall be able to assemble, attach and sew pocket cut pieces as per requirements and designs in accordance with specifications, sewing technique and Standard Operating Procedure (SOP). Upon completion of this competency unit, trainees will be able to:-</p> <ul style="list-style-type: none"> • Check pocket attachment requirements • Prepare pocket attachment requirements • Fold pocket cut piece • Carry out front bodice piece marking • Create apparel pocket opening • Sew attached pocket cut piece 						
PRE-REQUISITE (if applicable)		C01						
COMPETENCY UNIT ID		TA-020-2 :2014-C02	LEVEL	2	TRAINING DURATION	80 hours	SKILL CREDIT	8.0
Work Activities	Related Knowledge	Related Skills		Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria	
1. Check pocket attachment requirements	i. Job order information such as: <ul style="list-style-type: none"> • Delivery date • Quantity • Batch number • Colour • Special requirements – accessories (zipper, button, eyelet) 	i. Identify job order information ii. Interpret job specifications iii. Determine pocket measuring data from buyer measuring manual iv. Check production approved Apparel sample	<u>Attitude:</u> i. Thorough in interpreting and inquisitive in clarifying job specifications ii. Detailed in checking pocket attachment	<u>Related Knowledge</u> 2	<u>Related Knowledge</u> Lecture Question and Answer	i. Job order information specified ii. Job specifications listed iii. Pocket measuring data listed iv. Production approved apparel sample specified v. Materials		

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	ii. Job specifications such as: <ul style="list-style-type: none"> • Apparel type: <ul style="list-style-type: none"> ○ Shirt ○ Blouse ○ Jacket ○ Pants ○ Skirt • Size <ul style="list-style-type: none"> ○ Alphabets (S,M,L,XL) ○ Number (1,2,3,4) • Buyer code • Style • Sketch • Measurement method iii. Pocket measuring data from buyer measuring manual iv. Production approved Apparel sample v. Materials specifications: <ul style="list-style-type: none"> • Fabric type <ul style="list-style-type: none"> ○ French terry ○ taffeta ○ single jersey ○ cotton ○ woven • Fabric texture <ul style="list-style-type: none"> ○ Light ○ Heavy ○ Smooth ○ Coarse • Colour shading 	v. Identify materials specifications vi. Identify defects on materials vii. Interpret pocket specifications viii. Determine pockets attachment procedure, method and technique	requirements	<u>Related Skill</u> 6	<u>Related Skill</u> Demonstration Observation	specifications specified vi. Defects on materials categorised vii. Pocket specifications specified viii. Pockets creation and attachment procedure, method and technique described according to apparel type

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Thread specifications <ul style="list-style-type: none"> ○ Size/ticket number ○ Length ○ Colour • Labels <ul style="list-style-type: none"> ○ Size (S,M,L,XL /1,2,3,4) ○ Brand ○ Washable/non-washable ○ Country origin code vi. Defects on materials such as: <ul style="list-style-type: none"> • Fabric/materials <ul style="list-style-type: none"> ○ Knots ○ Double thick or thin yarns ○ Picks and holes ○ Loom Start Marks ○ Fabric Moire ○ Soiled filling ○ Corrugation ○ Dye spots, streaks or smears ○ Knitted in, foreign or coloured thread (off colour fly) ○ Snags, pulls in fabric • Colour <ul style="list-style-type: none"> ○ Shade to shade panel 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> ○ Wash/Finish Outside of Approved Shade band ● Dirt/Oil <ul style="list-style-type: none"> ○ Strong smell due to wash finish and/or residue ○ Non-removable stain ○ Removable stain vii. Pocket specifications such as: <ul style="list-style-type: none"> ● Types : <ul style="list-style-type: none"> ○ Patch ○ Side ○ Welt ● Dimension <ul style="list-style-type: none"> ○ Length ○ Width ○ Opening ● Measurement tolerance (+/-) ● Colours ● Interlining/ interfacing viii. Pockets creation and attachment procedure, method and technique <ul style="list-style-type: none"> ● Patching ● Inset (set-in) ● Cut-through 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
2. Prepare pocket attachment requirements	i. Work area, personal hygiene, health and safety requirements such as: <ul style="list-style-type: none"> • Workplace cleanliness and tidiness • Personal appearances <ul style="list-style-type: none"> ○ Neat hairstyle/covered ○ Body parts clean and tidy ○ Without jewellery • Company uniform/dress code policy • Ergonomic deportment: <ul style="list-style-type: none"> ○ Right body posture (sitting position) kept securely ○ Proper body posture when lifting heavy materials • Utilization of Personal Protective Equipment (PPE): <ul style="list-style-type: none"> ○ safety mask ○ glove (for white fabric) ○ covered low-heeled shoes ○ Safety glasses 	i. Check work area, personal hygiene, health and safety requirements ii. Check work station/machine table and sewing tools setting iii. Adjust chair height and distance from working table iv. Identify types of sewing machine v. Identify types of machine component vi. Check machine specifications and functions setting vii. Identify types of sewing tools and equipment viii. Select materials for pocket creation and attachment ix. Arrange materials on work station	<u>Attitude:</u> <ol style="list-style-type: none"> i. Resourceful in identifying tools, and materials ii. Adhere to work organization method and work procedure <u>Safety:</u> <ol style="list-style-type: none"> i. Sharp tools such as scissors, tweezers always tied up to work station and needles kept in place ii. Always work in proper lighting at workstation iii. Adhere to safety requirements at all time <u>Environmental:</u> <ol style="list-style-type: none"> i. Adhere to environmental procedures when handling 	<u>Related Knowledge</u> 2 <u>Related Skill</u> 6	<u>Related Knowledge</u> Lecture Question and Answer <u>Related Skill</u> Demonstration Observation	i. Work area, personal hygiene, health and safety requirements specified and safety practices demonstrated ii. Work station/machine table and sewing tools setting specified according to work flow iii. Chair height and distance from working table adjusted according to ergonomic department requirements iv. Types of sewing machine and components listed v. Machine specifications and functions setting described vi. Types of sewing tools and equipment listed and functions described vii. Materials for pocket creation and attachment selected according to pocket specifications

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	ii. Work station/ machine setting : <ul style="list-style-type: none"> • Arrangement • Condition • Height iii. Adjustable chairs for personnel sitting positions: <ul style="list-style-type: none"> • height • distance from workstation • back seats support iv. Types of sewing machine such as: <ul style="list-style-type: none"> • Lockstitch <ul style="list-style-type: none"> ○ Single needle ○ Double needle • Over lock v. Types of machine component such as: <ul style="list-style-type: none"> • Needles • Threads stands • Bobbin • Bobbin case • Machine safety devices (needle guard, wheel/ belt cover) vi. Machine specifications and functions setting such as: <ul style="list-style-type: none"> • Thread tension • Production specifications requirements such as: 		hazardous chemical/ additive materials			viii. Pocket materials inclusive cut pieces arrangement on work station demonstrated according to Standard Operating Procedure

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> o Stitch per inch (SPI) o Speed <p>vii. Types of sewing tools and equipment such as:</p> <ul style="list-style-type: none"> • Tweezers • Scissors/shears • Measuring marking device/tape • Equipment: <ul style="list-style-type: none"> o Steam press o Iron o Ironing table <p>viii. Selection of materials for pocket creation and attachment such as :</p> <ul style="list-style-type: none"> • Fabrics (cut pieces) • Threads • Interlining • Marker (special pen for fabric, chalk) • Soft paper <p>ix. Materials arrangement on workstation</p> <p>x. Standard Operating Procedure</p>					
3. Fold pocket cut piece	<p>i. Pocket specifications such as:</p> <ul style="list-style-type: none"> • Type • Shape • Size <p>ii. Pocket cut piece folding method and technique:</p> <ul style="list-style-type: none"> • Fabric and soft 	<p>i. Determine pocket specifications</p> <p>ii. Attach fabric and soft paper in sequence</p> <p>iii. Place pocket sample cardboard on pocket cut piece</p> <p>iv. Align pocket</p>	<p><u>Attitude:</u></p> <p>i. Focus in handling job</p> <p>ii. Follow direction folded edge pocket cut piece on sample</p>	<p><u>Related Knowledge</u></p> <p>6</p>	<p><u>Related Knowledge</u></p> <p>Lecture Question and Answer Group Discussion</p>	<p>i. Pocket specifications specified</p> <p>ii. Fabric and soft paper attachment demonstrated</p> <p>iii. Pocket sample cardboard placement on</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>paper attachment in sequence</p> <ul style="list-style-type: none"> • Placement/ position of pocket sample cardboard on the pocket cut piece • Alignment accuracy of pocket opening with fabric edge • Folding direction of pocket cut pieces on sample cardboard <p>iii. Folded edge finishing method :</p> <ul style="list-style-type: none"> • Iron (manually) • Hot press (automatic /manual) <p>iv. Pressing temperature specifications</p> <p>v. Sewing tools and equipment handling technique</p> <p>vi. Folded pocket appearance and defect checking method:</p> <ul style="list-style-type: none"> • Visual • Measure • Fit on model/ mannequin <p>vii. Pocket shape and appearance output:</p> <ul style="list-style-type: none"> • Folded edge in 	<p>opening with fabric edge</p> <p>v. Assure folding direction of pocket cut piece on sample cardboard</p> <p>vi. Press folded edge</p> <p>vii. Utilise sewing tools and equipment</p> <p>viii. Control pressing temperature</p> <p>ix. Check pocket shape and appearance output</p> <p>x. Execute corrective action on misshape pocket cut piece</p>	<p>cardboard</p> <p>iii. Apply both hands in a flexible manner during process of folding</p> <p>iv. Adhere to quality standards requirements</p> <p>v. Always practice good housekeeping inclusive personal hygiene</p> <p><u>Safety:</u></p> <p>i. Wear PPE during operation</p> <p>ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area</p> <p>iii. Adhere to safety requirements in handling hot/sharp</p>	<p><u>Related Skill</u></p> <p>14</p>	<p><u>Related Skill</u></p> <p>Demonstration Observation</p>	<p>pocket cut piece demonstrated</p> <p>iv. Pocket opening with fabric edge alignment demonstrated</p> <p>v. Folding direction of pocket cut piece on sample cardboard followed</p> <p>vi. Folded edge pressing demonstrated</p> <p>vii. Utilization of sewing tools and equipment demonstrated</p> <p>viii. Pressing temperature adjusted according temperature specifications</p> <p>ix. Folded fabric shape appearance output explained according to pocket specifications , quality standard requirements</p> <p>x. Corrective actions on misshape pocket cut piece demonstrated</p> <p>xi. Work area , personal hygiene, Health, Safety, Environment</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> place • Neatness viii. Corrective action on misshape pocket cut piece : <ul style="list-style-type: none"> • Adjustment • Re-Iron (manually/ automatically) 		items iv. Follow electrical components safety instructions <u>Environmental:</u> i. Adhere to environmental procedures when handling hazardous materials			(HSE) requirements and good housekeeping practised at all time
4. Carry out front bodice piece marking	i. Type of front bodice piece fabric ii. Marking position iii. Confirmation on pocket hole alignment iv. Pocket marking procedure: <ul style="list-style-type: none"> • Position of front bodice piece on sewing table with correct side up • Align pocket hole position and • Mark pocket position v. Bodice marking method such as: <ul style="list-style-type: none"> • Cardboard/pocket shape hole at cardboard 	i. Identify type of front bodice piece fabric ii. Determine marking positions iii. Align pocket hole position iv. Mark pocket position on front bodice piece v. Employ bodice marking method vi. Utilize marking materials, sewing tools and equipment vii. Check pocket marking output	<u>Attitude:</u> i. Precise in marking pocket position ii. Always check on marking materials iii. Apply both hands in a flexible manner during process of marking iv. Follow pocket marking procedure v. Adhere to quality standards	<u>Related Knowledge</u> 2 <u>Related Skill</u> 6	<u>Related Knowledge</u> Lecture Question and Answer Group Discussion <u>Related Skill</u> Demonstration Observation	i. Type of front bodice piece fabric listed ii. Marking positions specified iii. Pocket hole position alignment checked iv. Pocket position of front bodice piece marking demonstrated according to marking method v. Marking materials selected according to fabric type vi. Utilization of marking materials, sewing

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Marking point at machine • Computerised vi. Marking materials such as : <ul style="list-style-type: none"> • Fabric marker/ special washable ink marker • Chalk • Top stitch vii. Sewing tools and equipment handling technique viii. Marking appearance and defect checking method ix. Pocket marking output 		<p>requirements</p> <p>vi. Always practice good housekeeping inclusive personal hygiene</p> <p><u>Safety:</u></p> <p>i. Wear PPE during operation</p> <p>ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area</p> <p>iii. Adhere to safety requirements in handling hot/sharp items</p> <p>iv. Follow electrical components safety instructions</p>			<p>tools and equipment demonstrated</p> <p>vii. Pocket marking output explained according to pocket specifications and quality standard requirements</p> <p>viii. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all time</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
			<u>Environmental:</u> i. Adhere to environmental procedures when handling hazardous materials			
5. Create apparel pocket opening	i. Pocket opening design and specifications such as: <ul style="list-style-type: none"> • Type (side, welt) • Length • Width • Fabric texture ii. Pocket bag and front Apparel panel positions and alignment accuracy iii. Pocket flaps/cover creation procedure, method and technique iv. Position of pocket opening v. Pocket opening measurement vi. Pocket opening cutting method vii. Pocket bag attachment method: <ul style="list-style-type: none"> • Top stitching • Reverse stitching viii. Sewing tools and equipment handling technique ix. Pocket opening	i. Determine pocket opening design and specifications ii. Check pocket bag and front apparel panel positions and alignment accuracy iii. Check position of pocket opening iv. Check pocket opening measurement v. Create pocket opening vi. Attach pocket bag vii. Utilise sewing tools and equipment viii. Check pocket opening and pocket bag appearance output ix. Report findings of defect/defective x. Execute corrective action on misshape pocket opening and attached pocket bag	<u>Attitude:</u> i. Be accurate in placing folded pocket to the marking points ii. Apply both hands during process of sewing iii. Both hands and fingers must be flexible when operating tiny parts iv. Adhere to quality standards requirements v. Always practice good housekeeping inclusive personal hygiene	<u>Related Knowledge</u> 6 <u>Related Skill</u> 14	<u>Related Knowledge</u> Lecture Question and Answer Group Discussion <u>Related Skill</u> Demonstration Observation	i. Pocket opening design and specifications specified ii. Pocket bag and front apparel panel positions visually checked and alignment accuracy measured iii. Position of pocket opening described iv. Pocket opening measurement demonstrated v. Pocket opening cutting demonstrated according to opening cutting method vi. Pocket bag attachment demonstrated according to pocket bag attachment

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>appearance and defect checking method</p> <p>x. Pocket opening and pocket bag appearance output:</p> <ul style="list-style-type: none"> • Measurement accuracy • Folded edge in place <p>xi. Corrective action on misshape pocket opening and pocket bag :</p> <ul style="list-style-type: none"> • Adjustment • Re-Iron (manually/ automatically) 		<p><u>Safety:</u></p> <p>i. Wear PPE during operation</p> <p>ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/ designated area</p> <p>iii. Adhere to safety requirements in handling hot/sharp items</p> <p>iv. Follow electrical components safety instructions</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures when handling hazardous materials</p>			<p>method</p> <p>vii. Utilization of marking materials, sewing tools and equipment demonstrated</p> <p>xii. Apparel pocket opening appearance explained according to pocket specifications , quality standard requirements</p> <p>viii. Misshape pocket opening and pocket bag altered according to quality standards requirements</p> <p>ix. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all time</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
6. Sew attached pocket cut piece	i. Types of pocket such as: <ul style="list-style-type: none"> • Patch • Side • Welt ii. Types of accessories to be attached on pocket such as: <ul style="list-style-type: none"> • Zipper • Buttons • Eyelet and hook • Velcro • Self fabric flaps/cover iii. Placement and direction of folded edge pocket iv. Sewing direction on front bodice fabric v. Semi-finished pocket sewing procedure, method and technique vi. Sewing tools and equipment handling technique vii. Completed pocket appearance and defect checking method viii. Pocket finished appearance such as: <ul style="list-style-type: none"> • Neatly slashed/trimmed and unsightly threads removed • Cut opening dimension as per 	i. Determine types of pocket ii. Determine types of accessories to be attached on pocket iii. Check placement and direction of folded edge pocket iv. Check sewing direction v. Sew semi-finished pocket cut piece vi. Utilise sewing tools and equipment vii. Check pocket finished appearance viii. Detect type of defective stitching ix. Categorise defects, causes and sewing assembly defects details x. Report discrepancies /defects findings to superior	<u>Attitude:</u> <ol style="list-style-type: none"> Concentrate on sewing path and position Apply both hands during process of sewing Apply correct coordination between eyes and left –right hand motion Both hands and fingers must be flexible when operating tiny parts Adhere to quality standards requirements Always practice good housekeeping inclusive personal hygiene <u>Safety:</u> <ol style="list-style-type: none"> Wear PPE during operation Sharp tools such as cutting tools 	<u>Related Knowledge</u> 5 <u>Related Skill</u> 11	<u>Related Knowledge</u> Lecture Question and Answer Group Discussion <u>Related Skill</u> Demonstration Observation	i. Types of pocket listed according to apparel specifications ii. Types of accessories to be attached on pocket listed and functions described iii. Placement and direction of folded edge pocket described iv. Sewing direction described v. Semi-finished pocket cut piece sewing demonstrated according to sewing method and technique vi. Utilization of sewing tools and equipment demonstrated vii. Completed pocket finished appearance and discrepancies/defects findings reported according to pocket specifications , quality standard requirements and

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>specifications</p> <ul style="list-style-type: none"> • No foreign materials from fabric <p>ix. Type of defective stitching such as:</p> <ul style="list-style-type: none"> • Puckering (ugly wrinkles) • Wobbling stitch (irregular stitching) • Stitch skipping (stitches sometimes skip) <p>x. Defect category and causes such as:</p> <ul style="list-style-type: none"> • Machine • Materials • Human • Method <p>xi. Sewing/assembly defects details:</p> <ul style="list-style-type: none"> • Stitching/Seams: <ul style="list-style-type: none"> ○ Tight or loose tension, skipped or broken stitches affecting serviceability/durability ○ Needle cut, nick, needle pull or visible abrasion caused by needles ○ Broken stitch 		<p>and hazardous chemical always kept in safe place/designated area</p> <p>iii. Adhere to safety requirements in handling hot/sharp items</p> <p>iv. Follow electrical components safety instructions</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures when handling hazardous materials</p>			<p>viii. procedure</p> <p>viii. Type of defective stitching listed and causes specified according to quality standards requirements</p> <p>ix. Pocket sewing defects categorised and details listed according to quality standards references, manuals and procedures</p> <p>x. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all time</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p style="text-align: center;">in seam or decorative stitching</p> <ul style="list-style-type: none"> • Measurement exceeding +- tolerance <p>ix. Discrepancies /defects findings reporting procedure and method:</p> <ul style="list-style-type: none"> • Verbally • Written <p>x. Quality standards requirements such as:</p> <ul style="list-style-type: none"> • Concept of “right the first time” /No defects/ defective • Measurement accuracy <p>xi. Quality standard references, manuals and procedures such as:</p> <ul style="list-style-type: none"> • Visual Defect Reference Guide • Apparel Defect Classification Manual • Job specifications • Accessories card/buyer special requirements manual • Defects work repair/rework procedure 					

Employability Skills

Core Abilities	Social Skills
<ul style="list-style-type: none"> 01.01 Identify and gather information 01.02 Document information, procedures or processes 01.04 Analyze information 01.06 Utilize word processor to process information 02.01 Interpret and follow manuals, instructions and SOP's 02.03 Communicate clearly 02.04 Prepare brief reports and checklists using standard forms 03.01 Apply cultural requirements to the workplace 03.02 Demonstrate integrity and apply ethical practices 03.03 Accept responsibility for own work and work area 03.05 Demonstrate safety skills 03.06 Respond appropriately to people and situations 04.01 Organize own work activities 04.02 Set and revise own objectives and goals 04.03 Organize and maintain own workplace 04.05 Demonstrate initiative and flexibility 	<ul style="list-style-type: none"> 1. Communication skills 2. Conceptual skills 3. Interpersonal skills 4. Learning skills 5. Leadership skills 6. Multitasking and prioritising 7. Self-discipline 8. Teamwork

Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. Sample of company documentation procedure (Job order sheet, Job specifications sheet, Standard Operating Procedure, measuring manual)	1:1
2. Quality Standard reference, manuals and procedures (Visual Defect Reference Guide, Apparel Defect Classification Manual, Accessories card/buyer special requirements manual, Defects work repair/rework procedure)	1:1
3. Production Apparel sample	1:25
4. Sample of fabric	As per required
5. Sample of pocket cut piece	As per required
6. Work station/table with adjustable chairs	1:5
7. Sewing machine (single/double needle lockstitch, overlock)	1:5

8. Sewing machine component (needles, threads stands, bobbin, bobbin case, machine safety devices (needle guard, wheel/belt cover))	1:5
9. Sample of machine operating manual	1:25
10. Sewing materials (interlining, threads, cardboard, soft paper, pen fabric/marker)	As per required
11. Dummy model	1:25
12. Sewing tools (tweezers, scissors, measuring tape/marketing device)	1:1
13. Equipment (hot press/iron/iron table)	1:5
14. Personal Protective Equipment (PPE) (gloves, safety mask, apron, etc)	1:1

REFERENCES

1. Betsy Hosegood eds. (2006), Complete of Sewing, Darling Kindersley Limited London, ISBN 13, 978-1-4053-1295-0
2. Claire Shaeffer, Sewing for the Apparel Industry (2nd Edition), (2012), ISBN 978-0131884434
3. Clifford L Blodget (2013), The Sewing Machine Master Guide: From Basic to Expert, Blodget Publishing, LLC, ISBN 978-0-9900227-2-5
4. Denham, Carolyn (2014), Elementary Sewing Skills from Merchant & Mills, Collins & Brown, ISBN 9781909397415
5. Dorothy Wood (2002) Sewing Skills & Techniques, Lorenz Books, ISBN 878-923160800-0
6. E. Drudi (2002) Figure Drawing For Fashion Design, Pepin Press Publisher, ISBN 978-9054960805
7. Janine Manslow Kathryn Mclelvey, 2002, Fashion Design Process, Innovation & Practice- Blackwell ISBN 0-632-05599-5
8. Maurice J. Johnson, Evelyn C. Moore (2001), Apparel Product Development, Second Edition, Prentice Hall, New Jersey, ISBN 0-13-025439-8
9. Myra Coles (1999), The Sewing Machine Book, Hutchinson and Co. (Publishers) Ltd, ISBN 0-09-173009-0
10. Pati palmer, Gail Brown, (2004), Sewing with Sergers: The Complete Handbook for Overlock Sewing (Serging . . . from Basics to Creative Possibilities series), A Palmer/Pietsch Publication ISBN 978 0935278255
11. Phyllis G. Tortora, Robert S. Merkel (2007), Fairchild's Dictionary of Textiles, 7th Edition, Fairchild Publications New York, ISBN 1-87005-707-3

CURRICULUM of COMPETENCY UNIT (CoCU)

SECTOR	TEXTILE & APPAREL						
SUB SECTOR	APPAREL MANUFACTURING						
JOB AREA	MASS PRODUCTION (SEWING SECTION)						
NOSS TITLE	SEWING OPERATION						
COMPETENCY UNIT TITLE	APPAREL PLACKET ATTACHMENT						
LEARNING OUTCOME	<p>The person who is competent in this competency unit shall be able to assemble, attach and sew placket cut pieces on bodice piece as per requirements and designs in accordance with placket specifications, placket sewing technique and Standard Operating Procedure (SOP). Upon completion of this competency unit, trainees will be able to:-</p> <ul style="list-style-type: none"> • Check placket attachment requirements • Prepare placket attachment requirements • Reinforce placket fabric • Attach placket to bodice piece • Sew attached placket 						
PRE-REQUISITE (if applicable)	C01						
COMPETENCY UNIT ID	TA-020-2 :2014-C03	LEVEL	2	TRAINING DURATION	80 hours	SKILL CREDIT	8.0
Work Activities	Related Knowledge	Related Skills		Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
1. Check placket attachment requirements	i. Job order information such as: <ul style="list-style-type: none"> • Delivery date • Quantity • Batch number • Colour • Special requirements (zipper, button, eyelet) 	i. Identify job order information ii. Interpret job specifications iii. Determine placket measuring data from buyer measuring manual iv. Check production approved apparel sample		<u>Attitude:</u> i. Thorough in interpreting and inquisitive in clarifying job specifications ii. Detailed in checking placket attachment	<u>Related Knowledge</u> 2	<u>Related Knowledge</u> Lecture Question and Answer	i. Job order information specified ii. Job specifications listed iii. Placket measuring data from buyer measuring

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	ii. Job specifications such as: <ul style="list-style-type: none"> • Apparel type: <ul style="list-style-type: none"> ○ Shirt ○ Blouse ○ Jacket ○ Mans dress • Size <ul style="list-style-type: none"> ○ Alphabets (S,M,L,XL) ○ Number (1,2,3,4) • Buyer code • Style • Sketch • Measurement method iii. Placket measuring data from buyer measuring manual iv. Production approved apparel sample v. Materials specifications: <ul style="list-style-type: none"> • Fabric type <ul style="list-style-type: none"> ○ French terry ○ taffeta ○ single jersey ○ cotton ○ woven • Fabric texture <ul style="list-style-type: none"> ○ Light ○ Heavy ○ Smooth ○ Coarse • Colour shading 	v. Identify materials specifications vi. Identify defects on materials vii. Identify sewing method and technique viii. Determine placket specifications	requirements	<u>Related Skill</u> 6	<u>Related Skill</u> Demonstration Observation	manual listed iv. Production approved apparel sample specified v. Materials specifications specified vi. Defects on materials categorised vii. Placket specifications specified viii. Sewing method and technique described according to apparel type

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Thread specifications <ul style="list-style-type: none"> ○ Size/ticket number ○ Length ○ Colour • Labels <ul style="list-style-type: none"> ○ Size (S,M,L,XL /1,2,3,4) ○ Brand ○ Washable/non-washable ○ Country origin code vi. Defects on materials such as: <ul style="list-style-type: none"> • Fabric/materials <ul style="list-style-type: none"> ○ Knots ○ Double thick or thin yarns ○ Picks and holes ○ Loom Start Marks ○ Fabric Moire ○ Soiled filling ○ Corrugation ○ Dye spots, streaks or smears ○ Knitted in, foreign or coloured thread (off colour fly) ○ Snags, pulls in fabric • Colour <ul style="list-style-type: none"> ○ Shade to shade 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> panel <ul style="list-style-type: none"> ○ Wash/Finish Outside of Approved Shade band • Dirt/Oil <ul style="list-style-type: none"> ○ Strong smell due to wash finish and/or residue ○ Non-removable stain ○ Removable stain vii. Sewing method and technique viii. Placket specifications such as: <ul style="list-style-type: none"> • Users gender <ul style="list-style-type: none"> ○ Female ○ Male • Types <ul style="list-style-type: none"> ○ continuous bound ○ bound faced hemmed ○ bound buttonhole as flat front • Dimension <ul style="list-style-type: none"> ○ Length ○ Width ○ Opening • Measurement tolerance (+/-) • Colours • Interlining/interfacing 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
2. Prepare placket attachment requirements	<p>i. Work area, personal hygiene, health and safety requirements such as:</p> <ul style="list-style-type: none"> • Workplace cleanliness and tidiness • Personal appearances <ul style="list-style-type: none"> ○ Neat hairstyle/covered ○ Body parts clean and tidy ○ Without jewellery • Company uniform/dress code policy • Ergonomic department: <ul style="list-style-type: none"> ○ Right body posture (sitting position) kept securely ○ Proper body posture when lifting heavy materials • Utilization of Personal Protective Equipment (PPE): <ul style="list-style-type: none"> ○ safety mask ○ glove (for white fabric) ○ covered low-heeled shoes ○ Safety glasses 	<p>i. Check work area, personal hygiene, health and safety requirements</p> <p>ii. Check work station/machine table and sewing tools setting</p> <p>iii. Adjust chair height and distance from working table</p> <p>iv. Identify types of sewing machine</p> <p>v. Identify types of machine component</p> <p>vi. Check machine specifications and functions setting</p> <p>vii. Identify types of sewing tools and equipment</p> <p>viii. Select materials for placket creation and attachment</p> <p>ix. Arrange cut pieces on work station</p>	<p><u>Attitude:</u></p> <p>i. Resourceful in identifying tools, and materials</p> <p>ii. Adhere to work organization method and work procedure</p> <p><u>Safety:</u></p> <p>i. Sharp tools such as scissors, tweezer always tied up to work station and needles kept in place</p> <p>ii. Always work in proper lighting at workstation</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures when handling hazardous chemical/additive materials</p>	<p><u>Related Knowledge</u></p> <p>4</p> <p><u>Related Skill</u></p> <p>8</p>	<p><u>Related Knowledge</u></p> <p>Lecture Question and Answer</p> <p><u>Related Skill</u></p> <p>Demonstration Observation</p>	<p>i. Work area, personal hygiene, health and safety requirements specified and safety practices demonstrated</p> <p>ii. Work station/machine table and sewing tools setting specified according to work flow</p> <p>iii. Chair height and distance from working table adjusted according to ergonomic department requirements</p> <p>iv. Types of sewing machine and components listed</p> <p>v. Machine specifications and functions setting described</p> <p>vi. Types of sewing tools and</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> ii. Work station/ machine setting : <ul style="list-style-type: none"> • Arrangement • Condition • Height iii. Adjustable chairs for personnel sitting positions: <ul style="list-style-type: none"> • Height • Distance from workstation • Back seats support iv. Types of sewing machine such as: <ul style="list-style-type: none"> • Lockstitch <ul style="list-style-type: none"> ○ Single needle ○ Double needle • Over lock v. Types of machine component such as: <ul style="list-style-type: none"> • Needles • Threads stands • Bobbin • Bobbin case • Machine safety devices (needle guard, wheel/ belt cover) vi. Machine specifications and functions setting such as: <ul style="list-style-type: none"> • Thread tension • Production specifications requirements such as: 					<ul style="list-style-type: none"> equipment listed and functions described vii. Materials for placket creation and attachment selected according to placket specifications viii. Placket materials inclusive cut pieces arrangement on work station demonstrated according to Standard Operating Procedure

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> o Stitch per inch (SPI) o Speed <p>vii. Types of sewing tools and equipment such as:</p> <ul style="list-style-type: none"> • Tweezers • Scissors/shears • Measuring marking device/tape • Equipment: <ul style="list-style-type: none"> o Steam press o Iron o Ironing table <p>viii. Selection of materials for placket creation and attachment such as :</p> <ul style="list-style-type: none"> • Fabrics (cut pieces) • Threads • Interlining • Marker (special pen for fabric, chalk) <p>ix. Materials arrangement on workstation</p> <p>x. Standard Operating Procedure</p>					
3. Reinforce placket fabric	<p>i. Placket specifications</p> <ul style="list-style-type: none"> • Placket fabric <ul style="list-style-type: none"> o Type o Texture <p>ii. Reinforcement materials specifications:</p> <ul style="list-style-type: none"> • Type <ul style="list-style-type: none"> o Hard fabric o Interlining 	<p>i. Check placket specifications</p> <p>ii. Check reinforcement materials specifications</p> <p>iii. Reinforce placket fabric</p> <p>iv. Utilise sewing tools and equipment</p> <p>v. Check placket shape</p>	<p><u>Attitude:</u></p> <p>i. Be accurate in placing interlining to fabric</p> <p>ii. Apply both hands during in a flexible manner process of</p>	<p><u>Related Knowledge</u></p> <p>5</p>	<p><u>Related Knowledge</u></p> <p>Lecture Question and Answer Group Discussion</p>	<p>i. Placket specifications specified</p> <p>ii. Reinforcement materials specifications specified according to fabric type</p> <p>iii. Placket fabric</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>(Fusible /infusible)</p> <ul style="list-style-type: none"> • Dimension • Texture <p>iii. Reinforcement method:</p> <ul style="list-style-type: none"> • Fusing (hot press/iron) • Sewn <p>iv. Sewing tools and equipment handling technique</p> <p>v. Reinforced fabric appearance and defect checking method:</p> <ul style="list-style-type: none"> • Visual • Measure • Fit on model/ mannequin <p>vi. Placket shape and condition appearance:</p> <ul style="list-style-type: none"> • Shape in place • Measurement as per specifications 	and condition appearance	<p>reinforcement</p> <p>iii. Adhere to quality standards requirements</p> <p>iv. Always practice good housekeeping inclusive personal hygiene</p> <p><u>Safety:</u></p> <p>i. Wear PPE during operation</p> <p>ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area</p> <p>iii. Adhere to safety requirements in handling hot/sharp items</p> <p>iv. Follow electrical components safety instructions</p>	<p><u>Related Skill</u></p> <p>11</p>	<p><u>Related Skill</u></p> <p>Demonstration Observation</p>	<p>reinforcement demonstrated</p> <p>iv. Utilization of sewing tools and equipment demonstrated</p> <p>v. Placket shape and condition appearance explained according to placket specifications and quality standard requirements</p> <p>vi. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all time</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
			<u>Environmental:</u> i. Adhere to environmental procedures when handling hazardous materials			
4. Attach placket to bodice piece	i. Front bodice piece design such as: <ul style="list-style-type: none"> • separated piece or single • combined piece ii. Front bodice marking method iii. Sewing marking position iv. Placement method of semi-finish placket on the front bodice v. Placket attachment technique vi. Sewing tools and equipment handling technique vii. Placket attachment appearance and defect checking method viii. Semi finished placket measurement tolerance	i. Determine front bodice piece design ii. Determine marking positions iii. Mark placket sewing position iv. Place semi-finish placket on the front bodice v. Execute placket attachment vi. Utilise sewing tools and equipment vii. Check attached placket appearance	<u>Attitude:</u> i. Be accurate in placing folded placket to the marking points ii. Apply both hands in a flexible manner during process of sewing v. Adhere to quality standards requirements vi. Always practice good housekeeping inclusive personal hygiene <u>Safety:</u> i. Wear PPE during	<u>Related Knowledge</u> 6 <u>Related Skill</u> 14	<u>Related Knowledge</u> Lecture Question and Answer Group Discussion <u>Related Skill</u> Demonstration Observation	i. Front bodice piece design described ii. Marking positions specified iii. Placket sewing position marking demonstrated iv. Semi-finish placket placement on the front bodice demonstrated v. Placket attached according to technique vi. Utilization of sewing tools and equipment demonstrated vii. Attached

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
			operation ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area iii. Adhere to safety requirements in handling hot/sharp items iv. Follow electrical components safety instructions <u>Environmental:</u> i. Adhere to environmental procedures when handling hazardous materials			placket appearance explained according to placket specifications and quality standards requirements viii. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all time
5. Sew attached placket	i. Sewing position of semi-finished placket (at the centre of marked position) ii. Placket edge triangle	i. Sewing position of semi-finished placket ii. Form placket edge triangle iii. Fold placket panel	<u>Attitude:</u> i. Concentrate on sewing path and position	<u>Related Knowledge</u> 8	<u>Related Knowledge</u> Lecture Question and	i. Sewing position of semi-finished placket specified

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	forming method: <ul style="list-style-type: none"> • Slit measurement at bodice neck • Snipping and stitching of the bodice neck corner iii. Placket panel folding technique (folded inside the front bodice piece and interfolded) iv. Placket sewing procedure, method and technique v. Sewing tools and equipment handling technique vi. Attached placket appearance and defect checking method vii. Placket finished appearance such as: <ul style="list-style-type: none"> • Neatly slashed/trimmed and unsightly threads removed • Cut opening dimension as per specifications • Shape in place • No foreign materials from fabric viii. Type of defective stitching such as: <ul style="list-style-type: none"> • Puckering (ugly 	iv. Sew attached placket v. Check placket finished appearance vi. Utilise sewing tools and equipment vii. Detect type of defective stitching viii. Categorise defects, causes and sewing assembly defects details ix. Report discrepancies /defects findings to superior	ii. Apply both hands during in a flexible manner process of sewing iii. Apply correct coordination between eyes and left –right hand motion iv. Adhere to quality standards requirements v. Always practice good housekeeping inclusive personal hygiene <u>Safety:</u> i. Wear PPE during operation ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area iii. Adhere to	Related Skill 16	Answer Group Discussion <u>Related Skill</u> Demonstration Observation	ii. Placket edge triangle forming demonstrated iii. Placket panel folding demonstrated according to folding technique iv. Attached placket sewing demonstrated according to sewing method and technique v. Utilization of sewing tools and equipment demonstrated vi. Placket finished appearance explained according to pocket specifications and quality standards requirements vii. Type of defective stitching listed and causes specified according to

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>wrinkles)</p> <ul style="list-style-type: none"> • Wobbling stitch (irregular stitching) • Stitch skipping (stitches sometimes skip) <p>ix. Defect category such as:</p> <ul style="list-style-type: none"> • Machine • Materials • Human • Method <p>x. Type of sewing/assembly defects:</p> <ul style="list-style-type: none"> • Stitching/seams: <ul style="list-style-type: none"> ○ Tight or loose tension, skipped or broken stitches affecting serviceability/durability ○ Needle cut, nick, needle pull or visible abrasion caused by needles ○ Foreign objects embedded in seams ○ Broken stitch in seam or decorative stitching 		<p>safety requirements in handling hot/sharp items</p> <p>iv. Follow electrical components safety instructions</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures when handling hazardous materials</p>			<p>quality standards requirements</p> <p>viii. Placket sewing defects categorised and details listed according to quality standards references, manuals and procedures</p> <p>ix. Placket discrepancies /defects findings reported to superior for further action according to reporting procedure and quality standard requirements</p> <p>x. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> ○ Any dropped stitch in a non-locking seam ○ Two or more consecutive skipped stitches on a ○ seaming or joining lock stitch ● Measurement exceeding +- tolerance <p>xi. Discrepancies /defects findings reporting procedure and method:</p> <ul style="list-style-type: none"> ● Verbally ● Written <p>ix. Quality standards requirements such as:</p> <ul style="list-style-type: none"> ● Concept of “right the first time” /No defects/ defective ● Measurement accuracy <p>x. Quality standard references, manuals and procedures such as:</p> <ul style="list-style-type: none"> ● Visual Defect Reference Guide ● Apparel Defect Classification Manual ● Job specifications ● Accessories 					time

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	card/buyer special requirements manual <ul style="list-style-type: none"> Defects work repair/rework procedure 					

Employability Skills

Core Abilities	Social Skills
01.01 Identify and gather information 01.02 Document information, procedures or processes 01.04 Analyze information 01.06 Utilize word processor to process information 02.01 Interpret and follow manuals, instructions and SOP's 02.03 Communicate clearly 02.04 Prepare brief reports and checklists using standard forms 03.01 Apply cultural requirements to the workplace 03.02 Demonstrate integrity and apply ethical practices 03.03 Accept responsibility for own work and work area 03.05 Demonstrate safety skills 03.06 Respond appropriately to people and situations 04.01 Organize own work activities 04.02 Set and revise own objectives and goals 04.03 Organize and maintain own workplace 04.05 Demonstrate initiative and flexibility	1. Communication skills 2. Conceptual skills 3. Interpersonal skills 4. Learning skills 5. Leadership skills 6. Multitasking and prioritising 7. Self-discipline 8. Teamwork

Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. Sample of company documentation procedure (Job order sheet, Job specifications sheet, Standard Operating Procedure, measuring manual ,defects work repair/rework procedure)	1:1
2. Quality Standard references and manuals (Visual Defect Reference Guide, Apparel Defect Classification Manual, Accessories card/buyer special requirements manual)	1:1
3. Production apparel sample	1:25
4. Sample of fabric	As per required
5. Sample of placket cut piece	As per required
6. Work station/table with adjustable chairs	1:5
7. Sewing machine (lockstitch, overlock)	1:5
8. Sewing machine component (needles, threads stands, bobbin, bobbin case, Machine safety devices (needle guard, wheel/belt cover))	1:5
9. Sample of machine operating manual	1:25
10. Sewing materials (interlining, threads,etc)	As per required
11. Dummy model	1:25
12. Sewing tools (tweezers, scissors, measuring tape/marketing device)	1:1
13. Equipment (hot press/iron/ironing table)	1:5
14. Personal Protective Equipment (PPE) (gloves, safety mask, apron, etc)	1:1

REFERENCES

1. Betsy Hosegood eds. (2006), Complete of Sewing, Darling Kindersley Limited London, ISBN 13, 978-1-4053-1295-0
2. Claire Shaeffer, Sewing for the Apparel Industry (2nd Edition), (2012), ISBN 978-0131884434
3. Clifford L Blodget (2013), The Sewing Machine Master Guide: From Basic to Expert, Blodget Publishing, LLC, ISBN 978-0-9900227-2-5
4. Denham, Carolyn (2014), Elementary Sewing Skills from Merchant & Mills, Collins & Brown, ISBN 9781909397415
5. Dorothy Wood (2002) Sewing Skills & Techniques, Lorenz Books, ISBN 878-923160800-0
6. Janine Manslow Kathryn McIelvey, 2002, Fashion Design Process, Innovation & Practice- Blackwell ISBN 0-632-05599-5

7. Maurice J. Johnson, Evelyn C. Moore (2001), Apparel Product Development, Second Edition, Prentice Hall, New Jersey, ISBN 0-13-025439-8
8. Myra Coles (1999), The Sewing Machine Book, Hutchinson and Co. (Publishers) Ltd, ISBN 0-09-173009-0
9. Pati palmer, Gail Brown, (2004), Sewing with Sergers: The Complete Handbook for Overlock Sewing (Serging . . . from Basics to Creative Possibilities series), A Palmer/Pletsch Publication ISBN 978 0935278255
10. Phyllis G. Tortora, Robert S. Merkel (2007), Fairchilds's Dictionary of Textiles, 7th Edition, Fairchild Publications New York, ISBN 1-87005-707-3

CURRICULUM of COMPETENCY UNIT (CoCU)

SECTOR		TEXTILE & APPAREL						
SUB SECTOR		APPAREL MANUFACTURING						
JOB AREA		MASS PRODUCTION (SEWING SECTION)						
NOSS TITLE		SEWING OPERATION						
COMPETENCY UNIT TITLE		APPAREL SHOULDER , SLEEVES AND SIDE SEAM ATTACHMENT						
LEARNING OUTCOME		<p>The person who is competent in this competency unit shall be able to join and sew the front and back bodice pieces and sleeves cut pieces as per requirements and designs in accordance with specifications, garment shoulder sewing technique and Standard Operating Procedure (SOP). Upon completion of this competency unit, trainees will be able to:-</p> <ul style="list-style-type: none"> • Prepare shoulder, sleeve and side seam attachment requirements • Carry out shoulder attachment • Carry out sleeve and side seam attachment • Check shoulder, sleeve and side seam output 						
PRE-REQUISITE (if applicable)		C01						
COMPETENCY UNIT ID		TA-020-2 : 2014-C04	LEVEL	2	TRAINING DURATION	80 hours	SKILL CREDIT	8.0
Work Activities	Related Knowledge	Related Skills		Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria	
1. Prepare shoulder, sleeve and side seam attachment requirements	i. Work area, personal hygiene, health and safety requirements such as: <ul style="list-style-type: none"> • Workplace cleanliness and tidiness • Personal appearances <ul style="list-style-type: none"> ○ Neat hairstyle/ covered ○ Body parts clean and tidy ○ Without 	i. Check work area, personal hygiene, health and safety requirements ii. Identify job order information iii. Interpret job specification iv. Check production approved apparel sample v. Identify materials specification vi. Identify defects on		<u>Attitude:</u> <ol style="list-style-type: none"> Thorough in interpreting and inquisitive in clarifying job order Detailed in checking product specification Resourceful in locating and arranging tools, equipment and materials 	<u>Related Knowledge</u> 2 <u>Related Skill</u> 6	<u>Related Knowledge</u> Lecture Question and Answer <u>Related Skill</u> Demonstration Observation	i. Work area, personal hygiene, health and safety requirements specified and safety practices demonstrated ii. Job order information specified iii. Job	

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>jewellery</p> <ul style="list-style-type: none"> • Company uniform/dress code policy • Utilization of Personal Protective Equipment (PPE): <ul style="list-style-type: none"> ○ safety mask ○ glove (for white fabric) ○ covered low-heeled shoes ○ Safety glasses • Ergonomic department: <ul style="list-style-type: none"> ○ Right body posture (sitting position) kept securely ○ Proper body posture when lifting heavy materials <p>ii. Job order information such as:</p> <ul style="list-style-type: none"> • Delivery date • Quantity • Batch number • Colour • Special requirements – accessories (darts, pleats, gather, button) <p>iii. Job specification such as:</p> <ul style="list-style-type: none"> • Apparel type: 	<p>materials</p> <ul style="list-style-type: none"> vii. Identify sewing method and technique viii. Check work station/machine table and sewing tools setting ix. Adjust chair height and distance from working table x. Identify types of sewing machine xi. Identify types of machine component xii. Check machine specification and functions setting xiii. Identify types of sewing tools and equipment xiv. Arrange cut pieces on work station 	<ul style="list-style-type: none"> iv. Adhere to work organization method and work procedure <p><u>Safety:</u></p> <ul style="list-style-type: none"> ii. Wear PPE during operation iii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area iv. Adhere to safety requirements in handling hot/sharp items <p><u>Environmental:</u></p> <ul style="list-style-type: none"> i. Adhere to environmental procedures when handling hazardous materials 			<p>specification listed</p> <ul style="list-style-type: none"> iv. Production approved apparel sample specified v. Materials specification specified vi. Defects on materials categorised vii. Sewing method and technique described according to apparel specification viii. Work station/machine table and sewing tools setting specified according to work flow ix. Chair height and distance from working table adjusted according to ergonomic department requirements x. Types of sewing machine and

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> ○ Shirt ○ Blouse ○ Jacket ● Size <ul style="list-style-type: none"> ○ Alphabets (S,M,L,XL) ○ Number (1,2,3,4) ● Buyer code ● Style ● Sketch ● Measurement method <p>iv. Production approved apparel sample</p> <p>v. Materials specification:</p> <ul style="list-style-type: none"> ● Fabric type <ul style="list-style-type: none"> ○ French terry ○ taffeta ○ single jersey ○ cotton ○ woven ● Fabric texture <ul style="list-style-type: none"> ○ Light ○ Heavy ○ Smooth ○ coarse) ● Colour shading ● Thread specification <ul style="list-style-type: none"> ○ size/ticket number, ○ length, ○ colour <p>vi. Defects on materials such as:</p> <ul style="list-style-type: none"> ● Fabric/materials 					<p>components listed</p> <p>xi. Machine specification and functions setting described</p> <p>xii. Types of sewing tools and equipment listed and functions described</p> <p>xiii. Materials inclusive cut pieces arrangement on work station demonstrated according to Standard Operating Procedure</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> ○ Knots ○ Double thick or thin yarns ○ Picks and holes ○ Loom Start Marks ○ Fabric Moire ○ Soiled filling ○ Corrugation ○ Dye spots, streaks or smears ○ Knitted in, foreign or coloured thread (off colour fly) ○ Snags, pulls in fabric ● Colour <ul style="list-style-type: none"> ○ Shade to shade panel ○ Wash/Finish Outside of Approved Shade band ● Dirt/Oil <ul style="list-style-type: none"> ○ Strong smell due to wash finish and/or residue ○ Non-removable stain ○ Removable stain <p>vii. Sewing method and technique</p> <p>viii. Work station/ machine setting :</p>					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Arrangement • Condition • Height ix. Adjustable chairs for personnel sitting positions: <ul style="list-style-type: none"> • Height • Distance from workstation • Back seats support x. Types of sewing machine such as: <ul style="list-style-type: none"> • Lockstitch <ul style="list-style-type: none"> ○ Single needle ○ Double needle • Over lock xi. Types of machine component such as: <ul style="list-style-type: none"> • Needles • Threads stands • Bobbin • Bobbin case • Machine safety devices (needle guard, wheel/ belt cover) xii. Machine specification and functions setting such as: <ul style="list-style-type: none"> • Thread tension • Production specification requirements such as: <ul style="list-style-type: none"> ○ Stitch per inch (SPI) 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> o Speed xiii. Types of sewing tools and equipment such as: <ul style="list-style-type: none"> • Tweezers • Scissors/shears • Measuring marking device/tape • Equipment: <ul style="list-style-type: none"> o Hot press o Iron xiv. Materials, shoulder /sleeve cut piece arrangement					
2. Carry out shoulder attachment	i. Shoulder measuring data from buyer measuring manual ii. Shoulder design and specification such as: <ul style="list-style-type: none"> • Type • Shape • Size iii. Utilization of shoulder reinforcement materials if applicable: <ul style="list-style-type: none"> • Types (stay tape/twill tape) • Elastic/non-elastic iv. Back bodices pieces specification: <ul style="list-style-type: none"> • One piece • Back piece with yoke v. Yoke and back piece attachment procedure,	i. Determine shoulder measuring data from buyer measuring manual ii. Check shoulder design and specification iii. Utilize shoulder reinforcement materials iv. Check back bodices pieces specification v. Attach yoke and back piece ix. Check upper front bodies on upper back bodice piece placement and alignment accuracy x. Utilise sewing tools and equipment vi. Sew shoulder joints	<u>Attitude:</u> i. Focused in handling job ii. Apply both hands in a flexible manner during process of attachment iii. Adhere to shoulder attachment procedure iv. Adhere to quality standards requirements v. Always practice good housekeeping inclusive personal hygiene <u>Safety:</u>	<u>Related Knowledge</u> 2 <u>Related Skill</u> 6	<u>Related Knowledge</u> Lecture Question and Answer <u>Related Skill</u> Demonstration Observation	i. Shoulder measuring data listed ii. Shoulder design and specification specified Utilization of shoulder reinforcement materials demonstrated iii. Back bodices pieces specification specified iv. Yoke and back piece attachment demonstrated xi. Upper front bodies on

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>method and technique:</p> <ul style="list-style-type: none"> Place back piece between top and under yoke Shape (pleats) on back piece in line with notch mark Stitch yokes and back piece together Turn yokes up along stitch line <p>vi. Upper front bodies on upper back bodice piece placement and alignment accuracy</p> <p>vii. Sewing tools and equipment handling technique</p> <p>viii. Shoulder sewing procedure, method and technique</p>		<p>i. Wear PPE during operations</p> <p>ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area</p> <p>iii. Adhere to safety requirements in handling hot/sharp items</p> <p>iv. Follow electrical components safety instructions</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures when handling hazardous chemical/additive materials</p>			<p>upper back bodice piece placement and alignment accuracy checking demonstrated according to checking method</p> <p>xii. Shoulder joints sewing demonstrated according to sewing method and technique</p> <p>xiii. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all time</p>
3. Carry out sleeve and side seam attachment	<p>i. Sleeve and side seam measuring data from buyer measuring manual</p> <p>ii. Front and back bodice alignment</p> <p>iii. Side vent length</p>	<p>i. Determine sleeve and side seam measuring data from buyer measuring manual</p> <p>ii. Check front and back bodice alignment</p>	<p><u>Attitude:</u></p> <p>i. Focused in handling job</p> <p>ii. Apply both hands in a flexible manner during process of</p>	<p><u>Related Knowledge</u></p> <p>14</p>	<p><u>Related Knowledge</u></p> <p>Lecture Question and Answer Group</p>	<p>i. Sleeve and side seam measuring data specified</p> <p>ii. Front and back bodice aligned</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	measurement and marking method iv. Accuracy of both sides side vent length v. Sleeve cut piece placement on bodice piece and sewing position vi. Sleeve sewing method and technique vii. Sewing tools and equipment handling technique	iii. Measure and mark side vent iii. Check accuracy of both sides side vent length iv. Determine sleeve cut piece placement on bodice piece and sewing position v. Attach sleeve cut piece vi. Utilise sewing tools and equipment vii. Sew attached sleeve	attachment iii. Adhere to sleeve and side seam attachment procedure iv. Adhere to quality standards requirements v. Always practice good housekeeping inclusive personal hygiene <u>Safety:</u> i. Wear PPE during operations ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area iii. Adhere to safety requirements in handling hot/sharp items iv. Follow electrical components safety instructions <u>Environmental:</u> i. Adhere to	Related Skill 34	Discussion Related Skill Demonstration Observation	iii. Side vent measurement and marking demonstrated iv. Accuracy checking of both sides side vent length demonstrated according to checking method v. Sleeve cut piece placement on bodice piece demonstrated vi. Sleeve attachment demonstrated according to sewing method and technique vii. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all time

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
			environmental procedures when handling hazardous materials			
4. Check shoulder, sleeve and side seam output	<p>i. Shoulder, sleeve and side seam finished appearance and defect checking methods such as:</p> <ul style="list-style-type: none"> • Visual • Measure • Fit on model/mannequin <p>ii. Shoulder, sleeve and side seam finished appearance such as:</p> <ul style="list-style-type: none"> • Neatly slashed/trimmed and unsightly threads removed • Right and left bodice of joint shoulder dimension accuracy • No foreign materials from fabric <p>iii. Discrepancies in measurement</p> <p>iv. Type of defective stitching such as:</p> <ul style="list-style-type: none"> • Puckering (ugly wrinkles) • Wobbling stitch 	<p>i. Check shoulder, sleeve and side seam finished appearance and defect</p> <p>ii. Check discrepancies in measurement</p> <p>iii. Detect type of defective stitching</p> <p>iv. Categorise defects, causes and sewing assembly defects details</p> <p>v. Report discrepancies /defects findings to superior</p>	<p><u>Attitude:</u></p> <p>i. Precise in measuring parts</p> <p>ii. Details and thorough in inspecting cut materials</p> <p>iii. Adhere to quality standards requirements</p> <p>iv. Always practice good housekeeping inclusive personal hygiene</p> <p><u>Safety:</u></p> <p>i. Wear PPE during operations</p> <p>ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area</p> <p>iii. Adhere to safety requirements in handling</p>	<p><u>Related Knowledge</u></p> <p>5</p> <p><u>Related Skill</u></p> <p>11</p>	<p><u>Related Knowledge</u></p> <p>Lecture Question and Answer Group Discussion</p> <p><u>Related Skill</u></p> <p>Demonstration Observation</p>	<p>i. Shoulder, sleeve and side seam finished appearance and defect explained according to job specification</p> <p>ii. Type of defective stitching listed and causes specified according to quality standards requirements</p> <p>iii. Pocket sewing defects categorised and details listed according to quality standards references, manuals and procedures</p> <p>iv. Discrepancies /defects</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>(irregular stitching)</p> <ul style="list-style-type: none"> • Stitch skipping (stitches sometimes skip) <p>v. Defect category such as:</p> <ul style="list-style-type: none"> • Machine • Materials • Human • Method <p>vi. Types of sewing/assembly defects:</p> <ul style="list-style-type: none"> • Stitching/Seams <ul style="list-style-type: none"> ○ Tight or loose tension, skipped or broken stitches affecting serviceability/durability ○ Needle cut, nick, needle pull or visible abrasion caused by needles ○ Foreign objects embedded in seams ○ Broken stitch in seam or decorative stitching ○ Any dropped stitch in a non- 		<p>hot/sharp items</p> <p>iv. Follow electrical components safety instructions</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures when handling hazardous materials</p>			<p>findings reported to superior for further action according to reporting procedure and quality standard requirements</p> <p>v. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all time</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> locking seam ○ Two or more consecutive skipped stitches on a ○ seaming or joining lock stitch ● Measurement exceeding +- tolerance vii. Discrepancies /defects findings reporting procedure and method: <ul style="list-style-type: none"> ● Verbally ● Written viii. Quality standards requirements such as: <ul style="list-style-type: none"> ● Concept of “right the first time” /No defects/ defective ● Measurement accuracy ix. Quality standard references, manuals and procedures such as: <ul style="list-style-type: none"> ● Visual Defect Reference Guide ● Apparel Defect Classification Manual ● Job specifications ● Accessories card/buyer special requirements manual 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> Defects work repair/rework procedure 					

Employability Skills

Core Abilities	Social Skills
01.01 Identify and gather information 01.02 Document information, procedures or processes 01.04 Analyze information 01.06 Utilize word processor to process information 02.01 Interpret and follow manuals, instructions and SOP's 02.03 Communicate clearly 02.04 Prepare brief reports and checklists using standard forms 03.01 Apply cultural requirements to the workplace 03.02 Demonstrate integrity and apply ethical practices 03.03 Accept responsibility for own work and work area 03.05 Demonstrate safety skills 03.06 Respond appropriately to people and situations 04.01 Organize own work activities 04.02 Set and revise own objectives and goals 04.03 Organize and maintain own workplace 04.05 Demonstrate initiative and flexibility	1. Communication skills 2. Conceptual skills 3. Interpersonal skills 4. Learning skills 5. Leadership skills 6. Multitasking and prioritising 7. Self-discipline 8. Teamwork

Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. Sample of company documentation procedure (Job order sheet, Job specification sheet, Standard Operating Procedure, measuring manual)	1:1
2. Quality Standard reference, manuals and procedures (Visual Defect Reference Guide, Apparel Defect Classification Manual, Accessories card/buyer special requirements manual, Defects work repair/rework procedure)	1:1

3. Production apparel sample	1:25
4. Sample of fabric	As per required
5. Sample of parts section (front and bodice cut piece, yoke, sleeve)	As per required
6. Work station/table with adjustable chairs	1:5
7. Sewing machine (lockstitch, overlock)	1:5
8. Sewing machine component (needles, threads stands, bobbin, bobbin case, Machine safety devices (needle guard, wheel/belt cover))	1:5
9. Sample of machine operating manual	1:25
10. Sewing materials (interlining, threads, twill tape, etc)	As per required
11. Dummy model	1:25
12. Sewing tools (tweezers, scissors, measuring tape/marketing device)	1:1
13. Equipment (hot press/iron/ironing table)	1:5
14. Personal Protective Equipment (PPE) (gloves, safety mask, apron, etc)	1:1

REFERENCES

1. Betsy Hosegood eds. (2006), Complete of Sewing, Darling Kindersley Limited London, ISBN 13, 978-1-4053-1295-0
2. Dorothy Wood (2002) Sewing Skills & Techniques, Lorenz Books, ISBN 878-923160800-0
3. E. Drudi (2002) Figure Drawing For Fashion Design, Pepin Press Publisher, ISBN 978-9054960805
4. Myra Coles (1999), The Sewing Machine Book, Hutchinson and Co. (Publishers) Ltd, ISBN 0-09-173009-0
5. Janine Manslow Kathryn McIelvey, 2002, Fashion Design Process, Innovation & Practice- Blackwell ISBN 0-632-05599-5
6. Denham, Carolyn (2014), Elementary Sewing Skills from Merchant & Mills, Collins & Brown, ISBN 9781909397415
7. Clifford L Blodget (2013), The Sewing Machine Master Guide: From Basic to Expert, Blodget Publishing, LLC, ISBN 978-0-9900227-2-5
8. Claire Shaeffer, Sewing for the Apparel Industry (2nd Edition), (2012), ISBN 978-0131884434
9. Pati palmer, Gail Brown, (2004), Sewing with Sergers: The Complete Handbook for Overlock Sewing (Serging . . . from Basics to Creative Possibilities series), A Palmer/Pletsch Publication ISBN 978 0935278255

CURRICULUM of COMPETENCY UNIT (CoCU)

SECTOR		TEXTILE & APPAREL						
SUB SECTOR		APPAREL MANUFACTURING						
JOB AREA		MASS PRODUCTION (SEWING SECTION)						
NOSS TITLE		SEWING OPERATION						
COMPETENCY UNIT TITLE		COLLAR AND SLEEVE CUFF CREATION						
LEARNING OUTCOME		<p>The person who is competent in this competency unit shall be able to create and sew apparel collar and sleeve cuff as per requirements and designs in accordance with specifications, collar sewing technique and Standard Operating Procedure (SOP). Upon completion of this competency unit, trainees will be able to:-</p> <ul style="list-style-type: none"> • Prepare collar and sleeve cuff creation requirements • Carry out collar creation • Carry out sleeve cuff creation • Check collar and sleeve cuff output 						
PRE-REQUISITE (if applicable)		C01						
COMPETENCY UNIT ID		TA-020-2 : 2014-C05	LEVEL	2	TRAINING DURATION	40 hours	SKILL CREDIT	4.0
Work Activities	Related Knowledge	Related Skills		Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria	
1. Prepare collar and sleeve cuff creation requirements	i. Work area, personal hygiene, health and safety requirements such as: <ul style="list-style-type: none"> • Personal appearances <ul style="list-style-type: none"> ○ Neat hairstyle/ covered ○ Body parts clean and tidy ○ Without jewellery • Company uniform/dress code policy 	i. Check work area, personal hygiene, health and safety requirements ii. Identify job order information iii. Interpret job specifications iv. Check production approved apparel sample v. Identify materials specifications vi. Identify defects on materials		<u>Attitude:</u> i. Thorough in interpreting and inquisitive in clarifying job order ii. Detailed in checking product specifications iii. Resourceful in locating and arranging tools, equipment and materials	<u>Related Knowledge</u> 1 <u>Related Skill</u> 3	<u>Related Knowledge</u> Lecture Question and Answer <u>Related Skill</u> Demonstration Observation	i. Work area, personal hygiene, health and safety requirements specified and safety practices demonstrated ii. Job order information specified iii. Job specifications	

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Utilization of Personal Protective Equipment (PPE): <ul style="list-style-type: none"> ○ safety mask ○ glove (for white fabric) ○ covered low-heeled shoes ○ Safety glasses • Ergonomic department: <ul style="list-style-type: none"> ○ Right body posture (sitting position) kept securely ○ Proper body posture when lifting heavy materials ii. Job order information such as: <ul style="list-style-type: none"> • Delivery date • Quantity • Batch number • Colour • Special requirements – accessories (darts, pleats, gather, button) iii. Job specifications such as: <ul style="list-style-type: none"> • Apparel type: <ul style="list-style-type: none"> ○ Shirt ○ Blouse ○ Jacket ○ Traditional 	<ul style="list-style-type: none"> vii. Identify sewing method and technique viii. Check work station/machine table and sewing tools setting ix. Adjust chair height and distance from working table x. Identify types of sewing machine xi. Identify types of machine component xii. Check machine specifications and functions setting xiii. Identify types of sewing tools and equipment xiv. Arrange cut pieces on work station 	<ul style="list-style-type: none"> iv. Adhere to work organization method and work procedure <p><u>Safety:</u></p> <ul style="list-style-type: none"> i. Wear PPE during preparation sewing requirements ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area iii. Adhere to safety requirements in handling hot items <p><u>Environmental:</u></p> <ul style="list-style-type: none"> ii. Adhere to environmental procedures when handling hazardous materials 			<ul style="list-style-type: none"> listed iv. Production approved apparel sample specified v. Materials specifications specified vi. Defects on materials categorised vii. Sewing method and technique described according to apparel specifications viii. Work station/machine table and sewing tools setting specified according to work flow ix. Chair height and distance from working table adjusted according to ergonomic department requirements x. Types of sewing machine and components

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>Dress</p> <ul style="list-style-type: none"> • Size <ul style="list-style-type: none"> ○ Alphabets (S,M,L,XL) ○ Number (1,2,3,4) • Buyer code • Style • Sketch • Measurement method <p>iv. Production approved apparel sample</p> <p>v. Materials specifications:</p> <ul style="list-style-type: none"> • Fabric type <ul style="list-style-type: none"> ○ French terry ○ taffeta ○ single jersey ○ cotton ○ woven • Fabric texture <ul style="list-style-type: none"> ○ Light ○ Heavy ○ Smooth ○ coarse) • Colour shading • Thread specifications <ul style="list-style-type: none"> ○ size/ticket number, ○ length, ○ colour <p>vi. Defects on materials such as:</p> <ul style="list-style-type: none"> • Fabric/materials <ul style="list-style-type: none"> ○ Knots 					<p>listed</p> <p>xi. Machine specifications and functions setting described</p> <p>xii. Types of sewing tools and equipment listed and functions described</p> <p>xiii. Materials inclusive cut pieces arrangement on work station demonstrated according to Standard Operating Procedure</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> ○ Double thick or thin yarns ○ Picks and holes ○ Loom Start Marks ○ Fabric Moire ○ Soiled filling ○ Corrugation ○ Dye spots, streaks or smears ○ Knitted in, foreign or coloured thread (off colour fly) ○ Snags, pulls in fabric ● Colour <ul style="list-style-type: none"> ○ Shade to shade panel ○ Wash/Finish Outside of Approved Shade band ● Dirt/Oil <ul style="list-style-type: none"> ○ Strong smell due to wash finish and/or residue ○ Non-removable stain ○ Removable stain <p>vii. Sewing method and technique</p> <p>viii. Work station/ machine setting :</p> <ul style="list-style-type: none"> ● Arrangement 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Condition • Height ix. Adjustable chairs for personnel sitting positions: <ul style="list-style-type: none"> • height • distance from workstation • back seats support x. Types of sewing machine such as: <ul style="list-style-type: none"> • Lockstitch <ul style="list-style-type: none"> ○ Single needle ○ Double needle • Over lock xi. Types of machine component such as: <ul style="list-style-type: none"> • Needles • Threads stands • Bobbin • Bobbin case • Machine safety devices (needle guard, wheel/ belt cover) xii. Machine specifications and functions setting such as: <ul style="list-style-type: none"> • Thread tension • Production specifications requirements such as: <ul style="list-style-type: none"> ○ Stitch per inch (SPI) ○ Speed 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Fusible/ infusible, • Hard fabric/ interlining • Dimension, • Texture <p>iii. Collar fabric reinforcement (interlining) method such as:</p> <ul style="list-style-type: none"> • Fusing (hot press/iron) • Sewing <p>iv. Collar creation procedure, method and technique such as:</p> <ul style="list-style-type: none"> • Fuse collar interlining / sew interlining on fabric • Hem top collar • Run stitch collar • Trim and notch collar • Crease collar • Topstitch collar • Quilt collar stand <p>v. Sewing tools and equipment handling technique</p> <p>vi. Shape and condition of reinforced collar fabric check method</p> <p>vii. Collar fabric and interlining materials measurement and alignment</p>		<p><u>Safety:</u></p> <p>i. Wear PPE during operations</p> <p>ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area</p> <p>iii. Adhere to safety requirements in handling hot items</p> <p>iv. Follow electrical components safety instructions</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures when handling hazardous chemical/additive materials</p>			<p>method and technique</p> <p>vi. Shape and condition of reinforced sleeve cuff fabric checking demonstrated</p> <p>vii. Sleeve cuff fabric and interlining materials measurement and alignment checking demonstrated according to checking method</p> <p>ii. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all times</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	iii. Cuff fabric and interlining materials measurement and alignment		<p>safety requirements in handling hot items</p> <p>iv. Follow electrical components safety instructions</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures when handling hazardous chemical/additive materials</p>			<p>demonstrated according to method</p> <p>viii. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all times</p>
4. Check collar and sleeve cuff output	<p>i. Collar/sleeve cuff finished appearance and defect checking method such as:</p> <ul style="list-style-type: none"> • Visual • Measure • Fit on model/mannequin <p>ii. Collar/sleeve cuff finished appearance such as:</p> <ul style="list-style-type: none"> • Neatly slashed/trimmed and unsightly threads removed • Collar/sleeve cuff dimension (shape in place, 	<p>i. Check collar/sleeve cuff finished appearance and defect</p> <p>ii. Check discrepancies in measurement</p> <p>iii. Detect type of defective stitching</p> <p>iv. Categorise defects, causes and sewing assembly defects details</p>	<p><u>Attitude:</u></p> <p>i. Precise in measuring parts</p> <p>ii. Details and thorough in inspecting cut materials</p> <p>iii. Adhere to quality standards requirements</p> <p>iv. Always practice good housekeeping inclusive personal hygiene</p>	<p><u>Related Knowledge</u></p> <p>3</p> <p><u>Related Skill</u></p> <p>7</p>	<p><u>Related Knowledge</u></p> <p>Lecture Question and Answer Group Discussion</p> <p><u>Related Skill</u></p> <p>Demonstration Observation</p>	<p>i. Collar/ sleeve cuff finished appearance and defect explained according to job specifications</p> <p>ii. Type of defective stitching listed and causes specified according to quality standards requirements</p> <p>iii. Collar/sleeve</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>measurement within tolerance)</p> <ul style="list-style-type: none"> • Collar/sleeve opening dimension accuracy (height, centre) <p>iii. Discrepancies in measurement</p> <p>iv. Type of defective stitching such as:</p> <ul style="list-style-type: none"> • Puckering (ugly wrinkles) • Wobbling stitch (irregular stitching) • Stitch skipping (stitches sometimes skip) <p>v. Defect category such as:</p> <ul style="list-style-type: none"> • Machine • Materials • Human • Method <p>vi. Type of sewing/ assembly defects:</p> <ul style="list-style-type: none"> • Stitching/Seams <ul style="list-style-type: none"> ○ Tight or loose tension, skipped or broken stitches affecting serviceability/ durability ○ Needle cut, nick, needle pull or visible 		<p><u>Safety:</u></p> <p>i. Adhere to safety requirements during appearance and defect checking</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures when handling hazardous chemical/additive materials</p>			<p>cuff sewing defects categorised and details listed according to quality standards references, manuals and procedures</p> <p>iv. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all times</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>abrasion caused by needles</p> <ul style="list-style-type: none"> ○ Foreign objects embedded in seams ○ Broken stitch in seam or decorative stitching ○ Any dropped stitch in a non-locking seam ○ Two or more consecutive skipped stitches on a seaming or joining lock stitch ● Measurement exceeding +- tolerance <p>vii. Quality standards requirements such as:</p> <ul style="list-style-type: none"> ● Concept of “right the first time” /No defects/ defective ● Measurement accuracy <p>viii. Quality standard references, manuals and procedures such as:</p> <ul style="list-style-type: none"> ● Visual Defect Reference Guide ● Apparel Defect 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	Classification Manual <ul style="list-style-type: none"> • Job specifications • Accessories card/buyer special requirements manual • Defects work repair/rework procedure 					

Employability Skills

Core Abilities	Social Skills
01.01 Identify and gather information 01.02 Document information, procedures or processes 01.04 Analyze information 01.06 Utilize word processor to process information 02.01 Interpret and follow manuals, instructions and SOP's 02.03 Communicate clearly 02.04 Prepare brief reports and checklists using standard forms 03.01 Apply cultural requirements to the workplace 03.02 Demonstrate integrity and apply ethical practices 03.03 Accept responsibility for own work and work area 03.05 Demonstrate safety skills 03.06 Respond appropriately to people and situations 04.01 Organize own work activities 04.02 Set and revise own objectives and goals 04.03 Organize and maintain own workplace 04.05 Demonstrate initiative and flexibility	1. Communication skills 2. Conceptual skills 3. Interpersonal skills 4. Learning skills 5. Leadership skills 6. Multitasking and prioritising 7. Self-discipline 8. Teamwork

Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. Sample of company documentation procedure (Job order sheet, Job specifications sheet, Standard Operating Procedure, measuring manual)	1:1
2. Quality Standard reference, manuals and procedures (Visual Defect Reference Guide, Apparel Defect Classification Manual, Accessories card/buyer special requirements manual, Defects work repair/rework procedure)	1:1
3. Production apparel sample	1:25
4. Sample fabric	As per required
5. Sample parts section (collar, sleeve cuff)	As per required
6. Work station/table with adjustable chairs	1:5
7. Sewing machine (lockstitch, overlock)	1:5
8. Sewing machine component (needles, threads stands, bobbin, bobbin case, Machine safety devices (needle guard, wheel/belt cover))	1:5
9. Sample of machine operating manual	1:25
10. Sewing materials (interlining, threads, twill tape, etc)	As per required
11. Dummy model	1:25
12. Sewing tools (tweezers, scissors, measuring tape/marketing device)	1:1
13. Equipment (hot press/iron)	1:5
14. Personal Protective Equipment (PPE) (gloves, safety mask, apron, etc)	1:1

REFERENCES

1. Betsy Hosegood eds. (2006), Complete of Sewing, Darling Kindersley Limited London, ISBN 13, 978-1-4053-1295-0
2. Claire Shaeffer, Sewing for the Apparel Industry (2nd Edition), (2012), ISBN 978-0131884434
3. Clifford L Blodget (2013), The Sewing Machine Master Guide: From Basic to Expert, Blodget Publishing, LLC, ISBN 978-0-9900227-2-5
4. Denham, Carolyn (2014), Elementary Sewing Skills from Merchant & Mills, Collins & Brown, ISBN 9781909397415
5. Dorothy Wood (2002) Sewing Skills & Techniques, Lorenz Books, ISBN 878-923160800-0
6. E. Drudi (2002) Figure Drawing For Fashion Design, Pepin Press Publisher, ISBN 978-9054960805

7. Janine Manslow Kathryn Mcelvey, 2002, Fashion Design Process, Innovation & Practice- Blackwell ISBN 0-632-05599-5
8. Maurice J. Johnson, Evelyn C. Moore (2001), Apparel Product Development, Second Edition, Prentice Hall, New Jersey, ISBN 0-13-025439-8
9. Myra Coles (1999), The Sewing Machine Book, Hutchinson and Co. (Publishers) Ltd, ISBN 0-09-173009-0
10. Pati palmer, Gail Brown, (2004), Sewing with Sergers: The Complete Handbook for Overlock Sewing (Serging . . . from Basics to Creative Possibilities series), A Palmer/Pletsch Publication ISBN 978 0935278255
11. Phyllis G. Tortora, Robert S. Merkel (2007), Fairchilds's Dictionary of Textiles, 7th Edition, Fairchild Publications New York, ISBN 1-87005-707-3

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Company uniform/dress code policy • Ergonomic department: <ul style="list-style-type: none"> ○ Right body posture (sitting position) kept securely ○ Proper body posture when lifting heavy materials • Utilization of Personal Protective Equipment (PPE): <ul style="list-style-type: none"> ○ safety mask ○ glove (for white fabric) ○ covered low-heeled shoes ○ Safety glasses ii. Job order information such as: <ul style="list-style-type: none"> • Delivery date • Quantity • Batch number • Colour • Special requirements – accessories (darts, pleats, gather, button) iii. Job specifications such as: <ul style="list-style-type: none"> • Apparel type: <ul style="list-style-type: none"> ○ Shirt 	<ul style="list-style-type: none"> vii. Identify sewing method and technique viii. Check work station/machine table and sewing tools setting ix. Adjust chair height and distance from working table x. Identify types of sewing machine xi. Identify types of machine component xii. Check machine specifications and functions setting xiii. Identify types of sewing tools and equipment xiv. Arrange cut pieces on work station 	<p>and materials</p> <ul style="list-style-type: none"> iv. Adhere to work organization method and work procedure <p><u>Safety:</u></p> <ul style="list-style-type: none"> i. Wear PPE during preparation sewing requirements ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area iii. Adhere to safety requirements in handling hot/sharp items <p><u>Environmental:</u></p> <ul style="list-style-type: none"> i. Adhere to environmental procedures when handling 			<ul style="list-style-type: none"> listed iv. Production approved apparel sample specified v. Materials specifications specified vi. Defects on materials categorised vii. Sewing method and technique described according to apparel specifications viii. Work station/machine table and sewing tools setting specified according to work flow ix. Chair height and distance from working table adjusted according to ergonomic department requirements x. Types of sewing machine and components

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> ○ Blouse ○ Jacket ● Size <ul style="list-style-type: none"> ○ Alphabets (S,M,L,XL) ○ Number (1,2,3,4) ● Buyer code ● Style ● Sketch ● Measurement method <p>iv. Production approved apparel sample</p> <p>v. Materials specifications:</p> <ul style="list-style-type: none"> ● Fabric type <ul style="list-style-type: none"> ○ French terry ○ taffeta ○ single jersey ○ cotton ○ woven ● Fabric texture <ul style="list-style-type: none"> ○ Light ○ Heavy ○ Smooth ○ coarse) ● Colour shading ● Thread specifications <ul style="list-style-type: none"> ○ size/ticket number, ○ length, ○ colour <p>vi. Defects on materials such as:</p> <ul style="list-style-type: none"> ● Fabric/materials 		hazardous chemical/additive materials			<p>listed</p> <p>xi. Machine specifications and functions setting described</p> <p>xii. Types of sewing tools and equipment listed and functions described</p> <p>xiii. Materials inclusive cut pieces arrangement on work station demonstrated according to Standard Operating Procedure</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> ○ Knots ○ Double thick or thin yarns ○ Picks and holes ○ Loom Start Marks ○ Fabric Moire ○ Soiled filling ○ Corrugation ○ Dye spots, streaks or smears ○ Knitted in, foreign or coloured thread (off colour fly) ○ Snags, pulls in fabric ● Colour <ul style="list-style-type: none"> ○ Shade to shade panel ○ Wash/Finish Outside of Approved Shade band ● Dirt/Oil <ul style="list-style-type: none"> ○ Strong smell due to wash finish and/or residue ○ Non-removable stain ○ Removable stain <p>vii. Sewing method and technique</p> <p>viii. Work station/ machine setting :</p>					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Arrangement • Condition • Height ix. Adjustable chairs for personnel sitting positions: <ul style="list-style-type: none"> • Height • Distance from workstation • Back seats support x. Types of sewing machine such as: <ul style="list-style-type: none"> • Lockstitch <ul style="list-style-type: none"> ○ Single needle ○ Double needle • Over lock xi. Types of machine component such as: <ul style="list-style-type: none"> • Needles • Threads stands • Bobbin • Bobbin case • Machine safety devices (needle guard, wheel/ belt cover) xii. Machine specifications and functions setting such as: <ul style="list-style-type: none"> • Thread tension • Production specifications requirements such as: <ul style="list-style-type: none"> ○ Stitch per inch (SPI) 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Colour iii. Sewing tools and equipment handling technique iv. Collar sewing procedure , method and technique: <ul style="list-style-type: none"> • Place collar onto bodice piece neckline • Under collar notch marks match centre bodice balance mark and shoulder notch • Lift collar up • Wrap hemmed edge of top collar over apparel neckline • Stitch parts together • Insert apparel label (if applicable) • Backstitching at the start and end of stitching row v. Attached semi-finished placket sewing method and technique vi. Labels specifications such as: <ul style="list-style-type: none"> • Types (printed, in pieces) • Quantity • Dimension • Size 		<p>housekeeping inclusive personal hygiene</p> <p><u>Safety:</u></p> <ul style="list-style-type: none"> i. Wear PPE during operations ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area iii. Adhere to safety requirements in handling hot/sharp items iv. Follow electrical components safety instructions <p><u>Environmental:</u></p> <ul style="list-style-type: none"> i. Adhere to environmental procedures when handling 			<p>sewing demonstrated according to sewing method and technique</p> <p>viii. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all times</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	vii. Customer requirements on apparel labels such as: <ul style="list-style-type: none"> • Country origin standards • Code • Functions : <ul style="list-style-type: none"> ○ Apparel size ○ Fabric specifications/content and care (heat resistance, type of detergent can be used) ○ Apparel handling instruction • Label insertion by sequence/ buyer instructions viii. Label sewing method and technique		hazardous chemical/additive materials			
3. Carry out sleeve cuff sewing process	i. Sleeve cuff measuring data from buyer measuring manual such as: ii. Sleeve cuff design and specifications <ul style="list-style-type: none"> • Sleeve opening <ul style="list-style-type: none"> ○ Continuous strip ○ Sleeve placket • Shape • Materials (rib/ 	i. Determine sleeve cuff measuring data from buyer measuring manual ii. Check sleeve cuff design and specifications iii. Determine sleeve and cuff joint position iv. Utilise sewing tools and equipment v. Execute sleeve cuff sewing process	<u>Attitude:</u> <ol style="list-style-type: none"> i. Focused in handling job ii. Apply both hands in a flexible manner during sleeve cuff sewing process iii. Adhere to sleeve cuff 	<u>Related Knowledge</u> 7 <u>Related Skill</u> 15	<u>Related Knowledge</u> Lecture Question and Answer <u>Related Skill</u> Demonstration Observation	i. Sleeve cuff measuring data specified ii. Sleeve cuff design and specifications specified iii. Sleeve and cuff joint position specified iv. Sleeve cuff sewing

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>made)</p> <ul style="list-style-type: none"> • Direction • Length, • Width, • Thickness, • Colour <p>iii. Sleeve and cuff joint position</p> <p>iv. Sewing tools and equipment handling technique</p> <p>v. Sleeve cuff sewing procedure such as:</p> <ul style="list-style-type: none"> • Mount cuff into gauge, with seam allowance of the top and under cuff folded inwards (if applicable) • Sandwich sleeve into cuff • Edge stitch cuff and sleeve together, backstitching at the start and end of stitching row <p>ix. Sleeve cuff sewing method and technique</p>		<p>sewing procedure</p> <p>iv. Adhere to quality standards requirements</p> <p>v. Always practice good housekeeping inclusive personal hygiene</p> <p><u>Safety:</u></p> <p>i. Wear PPE during operations</p> <p>ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area</p> <p>iii. Adhere to safety requirements in handling hot/sharp items</p> <p>iv. Follow electrical components</p>			<p>process demonstrated</p> <p>v. Attached semi-placket sewing demonstrated according to sewing method and technique</p> <p>vi. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all times</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
			<p>safety instructions</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures when handling hazardous chemical/additive materials</p>			
4. Check collar, label and sleeve cuff attachment output	<p>i. Collar, label and sleeve cuff finished appearance and defect checking method such as:</p> <ul style="list-style-type: none"> • Visual • Measure • Fit on model/mannequin <p>ii. Collar, label and sleeve cuff finished appearance such as:</p> <ul style="list-style-type: none"> • Neatly slashed/trimmed and unsightly threads removed • Right and left bodice of joint shoulder dimension accuracy • No foreign materials from fabric 	<p>i. Check collar, label and sleeve cuff finished appearance and defect</p> <p>ii. Check discrepancies in measurement</p> <p>iii. Detect type of defective stitching</p> <p>iv. Categorise defects, causes and sewing assembly defects details</p> <p>v. Report discrepancies /defects findings to superior</p>	<p><u>Attitude:</u></p> <p>i. Precise in measuring parts</p> <p>ii. Details and thorough in inspecting cut materials</p> <p>iii. Adhere to quality standards requirements</p> <p>iv. Always practice good housekeeping inclusive personal hygiene</p> <p><u>Safety:</u></p> <p>i. Wear PPE during operation</p> <p>ii. Sharp tools</p>	<p><u>Related Knowledge</u></p> <p>3</p> <p><u>Related Skill</u></p> <p>7</p>	<p><u>Related Knowledge</u></p> <p>Lecture Question and Answer Group Discussion</p> <p><u>Related Skill</u></p> <p>Demonstration Observation</p>	<p>i. Collar, label and sleeve cuff finished appearance and defect explained according to job specifications</p> <p>ii. Type of defective stitching listed and causes specified according to quality standards requirements</p> <p>iii. Collar, label and sleeve cuff sewing defects categorised and details</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Labels are located at correct location • Labels insecurely attached to apparel <p>iii. Discrepancies in measurement</p> <p>iv. Type of defective stitching such as:</p> <ul style="list-style-type: none"> • Puckering (ugly wrinkles) • Wobbling stitch (irregular stitching) • Stitch skipping (stitches sometimes skip) <p>v. Defect category such as:</p> <ul style="list-style-type: none"> • Machine • Materials • Human • Method <p>vi. Type of sewing/assembly defects:</p> <ul style="list-style-type: none"> • Stitching/Seams <ul style="list-style-type: none"> ○ Tight or loose tension, skipped or broken stitches affecting serviceability/durability ○ Needle cut, nick, needle pull or visible 		<p>such as cutting tools and hazardous chemical always kept in safe place/designated area</p> <p>iii. Adhere to safety requirements in handling hot/sharp items</p> <p>iv. Follow electrical components safety instructions</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures when handling hazardous materials</p>			<p>listed according to quality standards references, manuals and procedures</p> <p>iv. Discrepancies /defects findings reported to superior for further action according to reporting procedure and quality standard requirements</p> <p>v. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all times</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>abrasion caused by needles</p> <ul style="list-style-type: none"> ○ Foreign objects embedded in seams ○ Broken stitch in seam or decorative stitching ○ Any dropped stitch in a non-locking seam ○ Two or more consecutive skipped stitches on a seaming or joining lock stitch ● Measurement exceeding +- tolerance <p>vii. Discrepancies /defects findings reporting procedure and method:</p> <ul style="list-style-type: none"> ● Verbally ● Written <p>viii. Quality standards requirements such as:</p> <ul style="list-style-type: none"> ● Concept of “right the first time” /No defects/ defective ● Measurement accuracy <p>ix. Quality standard references, manuals</p>					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	and procedures such as: <ul style="list-style-type: none"> • Visual Defect Reference Guide • Apparel Defect Classification Manual • Accessories card/buyer special requirements manual • Defects work repair/rework procedure 					

Employability Skills

Core Abilities	Social Skills
01.01 Identify and gather information 01.02 Document information, procedures or processes 01.04 Analyze information 01.06 Utilize word processor to process information 02.01 Interpret and follow manuals, instructions and SOP's 02.03 Communicate clearly 02.04 Prepare brief reports and checklists using standard forms 03.01 Apply cultural requirements to the workplace 03.02 Demonstrate integrity and apply ethical practices 03.03 Accept responsibility for own work and work area 03.05 Demonstrate safety skills 03.06 Respond appropriately to people and situations 04.01 Organize own work activities 04.02 Set and revise own objectives and goals 04.03 Organize and maintain own workplace 04.05 Demonstrate initiative and flexibility	1. Communication skills 2. Conceptual skills 3. Interpersonal skills 4. Learning skills 5. Leadership skills 6. Multitasking and prioritising 7. Self-discipline 8. Teamwork

Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. Sample of company documentation procedure (Job order sheet, Job specifications sheet, Standard Operating Procedure, measuring manual)	1:1
2. Quality Standard reference, manuals and procedures (Visual Defect Reference Guide, Apparel Defect Classification Manual, Accessories card/buyer special requirements manual, Defects work repair/rework procedure)	1:1
3. Production apparel sample	1:25
4. Sample of fabric	As per required
5. Sample of parts section (Collar, label, sleeve cuff)	As per required
6. Work station/table with adjustable chairs	1:5
7. Sewing machine (lockstitch, overlock)	1:5
8. Sewing machine component (needles, threads stands, bobbin, bobbin case, Machine safety devices (needle guard, wheel/belt cover))	1:5
9. Sample of machine operating manual	1:25
10. Sewing materials (interlining, threads, etc)	As per required
11. Dummy model	1:25
12. Sewing tools (tweezers, scissors, measuring tape/marketing device)	1:1
13. Equipment (hot press/iron)	1:5
14. Personal Protective Equipment (PPE) (gloves, safety mask, apron, etc)	1:1

REFERENCES

1. Betsy Hosegood eds. (2006), Complete of Sewing, Darling Kindersley Limited London, ISBN 13, 978-1-4053-1295-0
2. Claire Shaeffer, Sewing for the Apparel Industry (2nd Edition), (2012), ISBN 978-0131884434
3. Clifford L Blodget (2013), The Sewing Machine Master Guide: From Basic to Expert, Blodget Publishing, LLC, ISBN 978-0-9900227-2-5
4. Denham, Carolyn (2014), Elementary Sewing Skills from Merchant & Mills, Collins & Brown, ISBN 9781909397415
5. Dorothy Wood (2002) Sewing Skills & Techniques, Lorenz Books, ISBN 878-923160800-0
6. E. Drudi (2002) Figure Drawing For Fashion Design, Pepin Press Publisher, ISBN 978-9054960805

7. Janine Manslow Kathryn Mcelvey, 2002, Fashion Design Process, Innovation & Practice- Blackwell ISBN 0-632-05599-5
8. Maurice J. Johnson, Evelyn C. Moore (2001), Apparel Product Development, Second Edition, Prentice Hall, New Jersey, ISBN 0-13-025439-8
9. Myra Coles (1999), The Sewing Machine Book, Hutchinson and Co. (Publishers) Ltd, ISBN 0-09-173009-0
10. Pati palmer, Gail Brown, (2004), Sewing with Sergers: The Complete Handbook for Overlock Sewing (Serging . . . from Basics to Creative Possibilities series), A Palmer/Pletsch Publication ISBN 978 0935278255
11. Phyllis G. Tortora, Robert S. Merkel (2007), Fairchilds's Dictionary of Textiles, 7th Edition, Fairchild Publications New York, ISBN 1-87005-707-3

CURRICULUM of COMPETENCY UNIT (CoCU)

SECTOR	TEXTILE & APPAREL						
SUB SECTOR	APPAREL MANUFACTURING						
JOB AREA	MASS PRODUCTION (SEWING SECTION)						
NOSS TITLE	SEWING OPERATION						
COMPETENCY UNIT TITLE	BOTTOM AND SLEEVE HEM SEWING						
LEARNING OUTCOME	<p>The person who is competent in this competency unit shall be able to sew bottom and sleeve hem and apply sewing technique such as cover stitching as per requirements and designs in accordance with specifications and Standard Operating Procedure (SOP). Upon completion of this competency unit, trainees will be able to:-</p> <ul style="list-style-type: none"> • Check bottom and sleeve hem sewing requirements • Prepare bottom and sleeve hem sewing requirements • Sew bottom and sleeve hem • Check bottom and sleeve hem output 						
PRE-REQUISITE (if applicable)	C01						
COMPETENCY UNIT ID	TA-020-2: 2014-C07	LEVEL	2	TRAINING DURATION	40 hours	SKILL CREDIT	4.0
Work Activities	Related Knowledge	Related Skills		Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
1. Check bottom and sleeve hem sewing requirements	i. Job order information such as: <ul style="list-style-type: none"> • Delivery date • Quantity • Batch number • Colour • Special requirements – with/without reinforcement/ materials ii. Job specifications such as:	i. Identify job order information ii. Interpret job specifications iii. Determine Bottom And Sleeve Hem measuring data from buyer measuring manual iv. Check production approved apparel sample v. Identify materials specifications vi. Identify defects on		<u>Attitude:</u> i. Thorough in interpreting and inquisitive in clarifying job specifications ii. Detailed in checking bottom and sleeve hem sewing requirements	<u>Related Knowledge</u> 1 <u>Related Skill</u> 3	<u>Related Knowledge</u> Lecture Question and Answer <u>Related Skill</u> Demonstration Observation	i. Job order information specified ii. Job specifications listed iii. Bottom and sleeve Hem measuring data listed iv. Production approved apparel sample specified

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Apparel type: <ul style="list-style-type: none"> ○ Shirt ○ Blouse ○ Jacket • Size <ul style="list-style-type: none"> ○ Alphabets (S,M,L,XL) ○ Number (1,2,3,4) • Buyer code • Style • Sketch • Measurement method <p>iii. Sewing method and technique</p> <p>iv. Bottom And Sleeve Hem measuring data</p> <p>v. Production approved apparel sample</p> <p>vi. Materials specifications:</p> <ul style="list-style-type: none"> • Fabric type <ul style="list-style-type: none"> ○ French terry ○ taffeta ○ single jersey ○ cotton ○ woven • Fabric texture <ul style="list-style-type: none"> ○ Light ○ Heavy ○ Smooth ○ coarse) • Colour shading • Thread specifications <ul style="list-style-type: none"> ○ Size/ticket 	<p>materials</p> <p>vii. Interpret Bottom And Sleeve Hem specifications</p> <p>viii. Determine pockets attachment procedure, method and technique</p>				<p>v. Materials specifications specified</p> <p>vi. Defects on materials categorised</p> <p>vii. Bottom And Sleeve Hem specifications specified</p> <p>viii. Bottom And Sleeve Hem method and technique described according to apparel type</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> number <ul style="list-style-type: none"> o Length o Colour vii. Bottom And Sleeve Hem sewing method and technique					
2. Prepare bottom and sleeve hem sewing requirements	i. Work area, personal hygiene, health and safety requirements such as: <ul style="list-style-type: none"> • Personal appearances <ul style="list-style-type: none"> o Neat hairstyle/ covered o Body parts clean and tidy o Without jewellery • Company uniform/dress code policy • Utilization of Personal Protective Equipment (PPE): <ul style="list-style-type: none"> o safety mask o glove (for white fabric) o covered low-heeled shoes o Safety glasses • Ergonomic department: <ul style="list-style-type: none"> o Right body posture (sitting position) kept securely o Proper body 	i. Check work area, personal hygiene, health and safety requirements ii. Check work station/machine table and sewing tools setting iii. Adjust chair height and distance from working table iv. Identify types of sewing machine v. Identify types of machine component vi. Check machine specifications and functions setting vii. Identify types of sewing tools and equipment viii. Select materials for bottom and sleeve hem cover stitching ix. Arrange cut pieces on work station	<u>Attitude:</u> <ul style="list-style-type: none"> i. Resourceful in identifying tools, and materials ii. Adhere to work organization method and work procedure <u>Safety:</u> <ul style="list-style-type: none"> i. Sharp tools such as scissors, tweezers always tied up to work station and needles kept in place ii. Always work in proper lighting at workstation <u>Environmental:</u> <ul style="list-style-type: none"> i. Adhere to environmental 	<u>Related Knowledge</u> 1 <u>Related Skill</u> 3	<u>Related Knowledge</u> Lecture Question and Answer <u>Related Skill</u> Demonstration Observation	i. Work area, personal hygiene, health and safety requirements specified and safety practices demonstrated ii. Work station/machine table and sewing tools setting specified according to work flow iii. Chair height and distance from working table adjusted according to ergonomic department requirements iv. Types of sewing machine and components listed v. Machine

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>posture when lifting heavy materials</p> <p>ii. Work station/ machine setting :</p> <ul style="list-style-type: none"> • Arrangement • Condition • Height <p>iii. Adjustable chairs for personnel sitting positions:</p> <ul style="list-style-type: none"> • height • distance from workstation • back seats support <p>iv. Types of sewing machine such as:</p> <ul style="list-style-type: none"> • Lockstitch <ul style="list-style-type: none"> ○ Single needle ○ Double needle • Over lock <p>v. Types of machine component such as:</p> <ul style="list-style-type: none"> • Needles • Threads stands • Bobbin • Bobbin case • Machine safety devices (needle guard, wheel/ belt cover) <p>vi. Machine specifications and functions setting such as:</p> <ul style="list-style-type: none"> • Thread tension • Production 		<p>procedures when handling hazardous chemical/additive materials</p>			<p>specifications and functions setting described</p> <p>vi. Types of sewing tools and equipment listed and functions described</p> <p>vii. Materials for bottom and sleeve hem cover stitching selected according to apparel specifications</p> <p>viii. Bottom and sleeve hem cover stitching materials inclusive apparel arrangement on work station demonstrated according to Standard Operating Procedure</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> specifications requirements such as: <ul style="list-style-type: none"> ○ Stitch per inch (SPI) ○ Speed vii. Types of sewing tools and equipment such as: <ul style="list-style-type: none"> ● Tweezers ● Scissors ● Measuring marking device/tape ● Equipment: <ul style="list-style-type: none"> ○ Hot press ○ Iron viii. Selection of materials for bottom and sleeve hem cover stitching such as : <ul style="list-style-type: none"> ● Fabrics (cut pieces) ● Threads ● Reinforcement materials (elastic/non-elastic) ix. Materials arrangement on workstation x. Standard Operating Procedure 					
3. Sew bottom and sleeve hem	<ul style="list-style-type: none"> i. Types of bottom and sleeve hem such as: <ul style="list-style-type: none"> ● With/without rib ● Piping ● Self fabric ii. Reinforcement materials attachment 	<ul style="list-style-type: none"> i. Check types of bottom and sleeve hem ii. Utilise sewing tools and equipment iii. Attach reinforcement materials iv. Execute bottom and 	<u>Attitude:</u> <ul style="list-style-type: none"> i. Focused in handling job ii. Apply both hands during in a flexible manner 	<u>Related Knowledge</u> 7	<u>Related Knowledge</u> Lecture Question and Answer Group	<ul style="list-style-type: none"> i. Types of bottom and sleeve hem listed i. Utilization of sewing tools and equipment demonstrated

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>procedure (if applicable)</p> <p>iii. Bottom and sleeve hem sewing procedure:</p> <ul style="list-style-type: none"> • Fold fabric of bottom/sleeve parts • Sew folded bottom/sleeve <p>iv. Sewing tools and equipment handling technique</p> <p>v. Bottom and sleeve hem sewing technique such as:</p> <ul style="list-style-type: none"> • Interlocking • Blind stitching • Single needle • Cover stitching (2 needle, 3 needle) • Over locking (baby gauge) 	sleeve hem sewing process	<p>process of sewing</p> <p>iii. Apply correct coordination between eyes and left –right hand motion</p> <p>iv. Adhere to sleeve cuff creation procedure</p> <p>v. Adhere to quality standards requirements</p> <p>vi. Always practice good housekeeping inclusive personal hygiene</p> <p><u>Safety:</u></p> <p>i. Wear PPE during operations</p> <p>ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area</p> <p>iii. Adhere to</p>	<p><u>Related Skill</u></p> <p>17</p>	<p>Discussion</p> <p><u>Related Skill</u></p> <p>Demonstration Observation</p>	<p>iii. Reinforcement materials attachment demonstrated</p> <p>iv. Bottom and sleeve hem sewing process demonstrated</p> <p>v. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all time</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
			<p>safety requirements in handling hot/sharp items</p> <p>iv. Follow electrical components safety instructions</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures when handling hazardous chemical/additive materials</p>			
4. Check bottom and sleeve hem output	<p>i. Bottom and sleeve hem finished appearance and defect checking method such as:</p> <ul style="list-style-type: none"> • Visual • Measure • Fit on model/mannequin <p>ii. Bottom and sleeve hem finished appearance such as:</p> <ul style="list-style-type: none"> • Neatly slashed/trimmed and unsightly threads removed 	<p>i. Check bottom and sleeve hem finished appearance and defect</p> <p>ii. Check discrepancies in measurement</p> <p>iii. Detect type of defective stitching</p> <p>iv. Categorise defects, causes and sewing assembly defects details</p> <p>v. Report discrepancies /defects findings to superior</p>	<p><u>Attitude:</u></p> <p>i. Precise in measuring parts</p> <p>ii. Details and thorough in inspecting cut materials</p> <p>iii. Adhere to quality standards requirements</p> <p>iv. Always practice good housekeeping inclusive</p>	<p><u>Related Knowledge</u></p> <p>2</p> <p><u>Related Skill</u></p> <p>6</p>	<p><u>Related Knowledge</u></p> <p>Lecture Question and Answer Group Discussion</p> <p><u>Related Skill</u></p> <p>Demonstration Observation</p>	<p>i. Bottom and sleeve hem finished appearance and defect explained according to job specifications and quality standards requirements</p> <p>ii. Type of defective stitching listed and causes specified</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • No foreign materials from fabric <p>iii. Type of defective stitching such as:</p> <ul style="list-style-type: none"> • Puckering (ugly wrinkles) • Wobbling stitch (irregular stitching) • Stitch skipping (stitches sometimes skip) <p>iv. Defect category such as:</p> <ul style="list-style-type: none"> • Machine • Materials • Human • Method <p>v. Type of sewing/assembly defects:</p> <ul style="list-style-type: none"> • Stitching/Seams <ul style="list-style-type: none"> ○ Tight or loose tension, skipped or broken stitches affecting serviceability/durability ○ Needle cut, nick, needle pull or visible abrasion caused by needles 		<p>personal hygiene</p> <p><u>Safety:</u></p> <p>i. Adhere to safety requirements during appearance and defect checking</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures when handling hazardous materials</p>			<p>according to quality standards requirements</p> <p>iii. Bottom and sleeve hem sewing defects categorised and details listed according to quality standards references, manuals and procedures</p> <p>iv. Discrepancies /defects findings reported to superior for further action according to reporting procedure and quality standard requirements</p> <p>v. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> ○ Foreign objects embedded in seams ○ Broken stitch in seam or decorative stitching ○ Any dropped stitch in a non-locking seam ○ Two or more consecutive skipped stitches on a ○ seaming or joining lock stitch ● Measurement exceeding +- tolerance <p>vi. Discrepancies /defects findings reporting procedure and method:</p> <ul style="list-style-type: none"> ● Verbally ● Written <p>vii. Quality standards requirements such as:</p> <ul style="list-style-type: none"> ● Concept of “right the first time” /No defects/ defective Measurement accuracy <p>viii. Quality standard references, manuals and procedures such as:</p> <ul style="list-style-type: none"> ● Visual Defect 					housekeeping practised at all time

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	Reference Guide <ul style="list-style-type: none"> • Apparel Defect Classification Manual • Job specifications • Accessories card/buyer special requirements manual • Defects work repair/rework procedure 					

Employability Skills

Core Abilities	Social Skills
01.01 Identify and gather information 01.02 Document information, procedures or processes 01.04 Analyze information 01.06 Utilize word processor to process information 02.01 Interpret and follow manuals, instructions and SOP's 02.03 Communicate clearly 02.04 Prepare brief reports and checklists using standard forms 03.01 Apply cultural requirements to the workplace 03.02 Demonstrate integrity and apply ethical practices 03.03 Accept responsibility for own work and work area 03.05 Demonstrate safety skills 03.06 Respond appropriately to people and situations 04.01 Organize own work activities 04.02 Set and revise own objectives and goals 04.03 Organize and maintain own workplace 04.05 Demonstrate initiative and flexibility	1. Communication skills 2. Conceptual skills 3. Interpersonal skills 4. Learning skills 5. Leadership skills 6. Multitasking and prioritising 7. Self-discipline 8. Teamwork

Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. Sample of company documentation procedure (Job order sheet, Job specifications sheet, Standard Operating Procedure, measuring manual)	1:1
2. Quality Standard reference, manuals and procedures (Visual Defect Reference Guide, Apparel Defect Classification Manual, Accessories card/buyer special requirements manual, Defects work repair/rework procedure)	1:1
3. Production apparel sample	1:25
4. Sample of fabric	As per required
5. Sample of semi-finished apparel (without bottom hemming)	As per required
6. Work station/table with adjustable chairs	1:5
7. Sewing machine (lockstitch, overlock, coverstitch, blindstitch,interlock)	1:5
8. Sewing machine component (needles, threads stands, bobbin, bobbin case, Machine safety devices (needle guard, wheel/belt cover))	1:5
9. Sample of machine operating manual	1:25
10. Sewing materials (interlining, threads, zipper, button,etc)	As per required
11. Dummy model	1:25
12. Sewing tools (tweezers, scissors, measuring tape/marketing device)	1:1
13. Equipment (hot press/iron/ironing/table)	1:5
14. Personal Protective Equipment (PPE) (gloves, safety mask, apron, etc)	1:1

REFERENCES

1. Betsy Hosegood eds. (2006), Complete of Sewing, Darling Kindersley Limited London, ISBN 13, 978-1-4053-1295-0
2. Claire Shaeffer, Sewing for the Apparel Industry (2nd Edition), (2012), ISBN 978-0131884434
3. Clifford L Blodget (2013), The Sewing Machine Master Guide: From Basic to Expert, Blodget Publishing, LLC, ISBN 978-0-9900227-2-5
4. Denham, Carolyn (2014), Elementary Sewing Skills from Merchant & Mills, Collins & Brown, ISBN 9781909397415
5. Dorothy Wood (2002) Sewing Skills & Techniques, Lorenz Books, ISBN 878-923160800-0
6. E. Drudi (2002) Figure Drawing For Fashion Design, Pepin Press Publisher, ISBN 978-9054960805
7. Janine Manslow Kathryn McIelvey, 2002, Fashion Design Process, Innovation & Practice- Blackwell ISBN 0-632-05599-5

8. Maurice J. Johnson, Evelyn C. Moore (2001), *Apparel Product Development*, Second Edition, Prentice Hall, New Jersey, ISBN 0-13-025439-8
9. Myra Coles (1999), *The Sewing Machine Book*, Hutchinson and Co. (Publishers) Ltd, ISBN 0-09-173009-0
10. Pati palmer, Gail Brown, (2004), *Sewing with Sergers: The Complete Handbook for Overlock Sewing (Serging . . . from Basics to Creative Possibilities series)*, A Palmer/Pletsch Publication ISBN 978 0935278255
11. Phyllis G. Tortora, Robert S. Merkel (2007), *Fairchilds's Dictionary of Textiles*, 7th Edition, Fairchild Publications New York, ISBN 1-87005-707-3

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>such as:</p> <ul style="list-style-type: none"> • Apparel type <ul style="list-style-type: none"> ○ Khakis pants ○ Pleated pants ○ Flat front pants ○ Cargo pants ○ Chinos ○ Trousers ○ Sweat pants ○ Leggings • Size <ul style="list-style-type: none"> ○ Alphabets (S,M,L,XL) ○ Number (1,2,3,4) • Buyer code • Style • Sketch • Measurement method <p>iii. Pants measuring data from buyer measuring manual</p> <p>iv. Production approved apparel sample</p> <p>v. Materials specifications:</p> <ul style="list-style-type: none"> • Fabric type <ul style="list-style-type: none"> ○ French terry ○ taffeta ○ single jersey ○ cotton ○ woven • Fabric texture <ul style="list-style-type: none"> ○ Light ○ Heavy ○ Smooth 	<p>vi. Identify defects on materials</p> <p>vii. Interpret pants specifications</p> <p>viii. Determine pants sewing method and technique</p>				<p>specified</p> <p>v. Materials specifications specified</p> <p>vi. Defects on materials categorised</p> <p>vii. Pants specifications specified</p> <p>viii. Pants sewing method and technique described according to apparel type</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> ○ coarse) ● Colour shading ● Thread specifications <ul style="list-style-type: none"> ○ Size/ticket number ○ Length ○ Colour ● Labels <ul style="list-style-type: none"> ○ Size (S,M,L,XL /1,2,3,4) ○ Brand ○ Washable/non-washable ○ Country origin code vi. Defects on materials such as: <ul style="list-style-type: none"> ● Fabric/materials <ul style="list-style-type: none"> ○ Knots ○ Double thick or thin yarns ○ Picks and holes ○ Loom Start Marks ○ Fabric Moire ○ Soiled filling ○ Corrugation ○ Dye spots, streaks or smears ○ Knitted in, foreign or coloured thread (off colour fly) ○ Snags, pulls in fabric ● Colour 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> ○ Shade to shade panel ○ Wash/Finish Outside of Approved Shade band • Dirt/Oil <ul style="list-style-type: none"> ○ Strong smell due to wash finish and/or residue ○ Non-removable stain ○ Removable stain vii. Pants specifications such as: <ul style="list-style-type: none"> • Bodice parts (front, back panel) • Style • Dimension <ul style="list-style-type: none"> ○ Length ○ Width ○ Opening • Measurement tolerance (+/-) • Colours • Accessories (zipper, buttons) viii. Sewing method and technique 					
2. Prepare pants bodice attachment requirements	i. Work area, personal hygiene, health and safety requirements such as:	i. Check work area, personal hygiene, health and safety requirements	<u>Attitude:</u> i. Resourceful in identifying tools, and	<u>Related Knowledge</u> 2	<u>Related Knowledge</u> Lecture	i. Work area, personal hygiene, health and

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Workplace cleanliness and tidiness • Personal appearances <ul style="list-style-type: none"> ○ Neat hairstyle/ covered ○ Body parts clean and tidy ○ Without jewellery • Company uniform/dress code policy • Utilization of Personal Protective Equipment (PPE): <ul style="list-style-type: none"> ○ safety mask ○ glove (for white fabric) ○ covered low-heeled shoes ○ Safety glasses • Ergonomic department: <ul style="list-style-type: none"> ○ Right body posture (sitting position) kept securely ○ Proper body posture when lifting heavy materials <p>ii. Work station/ machine setting :</p> <ul style="list-style-type: none"> • Arrangement • Condition 	<p>ii. Check work station/machine table and sewing tools setting</p> <p>iii. Adjust chair height and distance from working table</p> <p>iv. Identify types of sewing machine</p> <p>v. Identify types of machine component</p> <p>vi. Check machine specifications and functions setting</p> <p>vii. Identify types of sewing tools and equipment</p> <p>viii. Select materials for pants bodice attachment</p> <p>ix. Arrange materials on work station</p>	<p>materials</p> <p>ii. Adhere to work organization method and work procedure</p> <p><u>Safety:</u></p> <p>i. Sharp tools such as scissors, tweezer always tied up to work station and needles kept in place</p> <p>ii. Always work in proper lighting at workstation</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures when handling hazardous chemical/additive materials</p>	<p><u>Related Skill</u></p> <p>6</p>	<p>Question and Answer</p> <p><u>Related Skill</u></p> <p>Demonstration Observation</p>	<p>safety requirements specified and safety practices demonstrated</p> <p>ii. Work station/ machine table and sewing tools setting specified according to work flow</p> <p>iii. Chair height and distance from working table adjusted according to ergonomic department requirements</p> <p>iv. Types of sewing machine and components listed</p> <p>v. Machine specifications and functions setting described</p> <p>vi. Types of sewing tools and equipment listed and functions described</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Height iii. Adjustable chairs for personnel sitting positions: <ul style="list-style-type: none"> • height • distance from workstation • back seats support iv. Types of sewing machine such as: <ul style="list-style-type: none"> • Lockstitch <ul style="list-style-type: none"> ○ Single needle ○ Double needle • Blindstitch • Overlock v. Types of machine component such as: <ul style="list-style-type: none"> • Needles • Threads stands • Bobbin • Bobbin case • Machine safety devices (needle guard, wheel/ belt cover) vi. Machine specifications and functions setting such as: <ul style="list-style-type: none"> • Thread tension • Production specifications requirements such as: <ul style="list-style-type: none"> ○ Stitch per inch (SPI) ○ Speed 					<ul style="list-style-type: none"> vii. Materials for pants bodice attachment selected according to pants specifications viii. Materials inclusive cut pieces arrangement on work station demonstrated according to Standard Operating Procedure

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	vii. Types of sewing tools and equipment such as: <ul style="list-style-type: none"> • Tweezers • Scissors • Measuring marking device/tape • Equipment: <ul style="list-style-type: none"> ○ Steam press ○ Iron ○ Ironing table viii. Selection of materials for pocket creation and attachment such as : <ul style="list-style-type: none"> • Fabrics (front and back cut pieces) • Threads • Marker (special pen for fabric, chalk) • Interlining ix. Materials arrangement on workstation x. Standard Operating Procedure					
3. Prepare pants fly	i. Fly specifications such as: <ul style="list-style-type: none"> • Cut pieces types: <ul style="list-style-type: none"> ○ fly facing ○ fly catch ○ catch lining • Length • Width • Thickness • Colour ii. Fly fabric	i. Check Fly specifications ii. Check Fly fabric specifications iii. Check reinforcement materials specifications iv. Reinforce placket fabric v. Utilise sewing tools and equipment vi. Execute fly	<u>Attitude:</u> i. Be accurate in placing interlining to fabric ii. Apply both hands during process of reinforcement iii. Both hands and fingers must be	<u>Related Knowledge</u> 2	<u>Related Knowledge</u> Lecture Question and Answer Group Discussion	i. Fly specifications specified ii. Reinforcement materials specifications specified according to fabric type ii. Fly fabric reinforcement demonstrated

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	specifications such as: <ul style="list-style-type: none"> • Type • Texture iii. Reinforcement materials specifications such as: <ul style="list-style-type: none"> • Type <ul style="list-style-type: none"> ○ Hard fabric ○ Interlining (Fusible /infusible) • Dimension • Texture iv. Fabric reinforcement method: <ul style="list-style-type: none"> • Fusing (hot press/iron) • Sewing v. Sewing tools and equipment handling technique vi. Fly preparation procedure, method and technique: <ul style="list-style-type: none"> • Fuse interlining on fly facing • Serge/over lock fused facing • Attach zipper (if applicable) • Over lock edge of fly catch • Join fly catch and catch lining together (right sides matching each other and 	preparation process vii. Check fly shape and condition appearance	flexible when operating tiny parts iv. Adhere to fly preparation procedure v. Adhere to quality standards requirements vi. Always practice good housekeeping inclusive personal hygiene <u>Safety:</u> <ul style="list-style-type: none"> i. Wear PPE during operation ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area iii. Adhere to safety requirements in handling hot/sharp items 	<u>Related Skill</u> 6	<u>Related Skill</u> Demonstration Observation	v. Utilization of sewing tools and equipment demonstrated v. Fly preparation demonstrated according to sewing method and technique vi. Fly shape and condition appearance explained according to fly specifications and quality standards requirements ii. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all times

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>with seam allowance)</p> <ul style="list-style-type: none"> • Turn right side of fly catch out • Edge stitch seam • Press seam allowances of catch lining inwards <p>vii. Fly appearance and defect checking method:</p> <ul style="list-style-type: none"> • Visual • Measure • Fit on model/ mannequin <p>viii. Fly shape and condition appearance:</p> <ul style="list-style-type: none"> • Either side of fly extends over other side by excessive amount • Width is not uniform • Bottom stopper does not securely clinched 		<p>iv. Follow electrical components safety instructions</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures when handling hazardous materials</p>			
4. Sew pants fly	<p>i. Stitching guideline marking</p> <p>ii. Fly facing placement onto fly front of pants (right side facing)</p> <p>iii. Sewing tools and equipment handling technique</p> <p>iv. Fly sewing procedure,</p>	<p>i. Determine stitching guideline marking</p> <p>ii. Place fly facing onto fly front of pants (right side facing)</p> <p>iii. Utilise sewing tools and equipment</p> <p>iv. Execute fly sewing process</p>	<p><u>Attitude:</u></p> <p>i. Concentrate on sewing path and position</p> <p>ii. Apply both hands during in a flexible manner</p>	8	<p><u>Related Knowledge</u></p> <p>Lecture Question and Answer Group Discussion</p>	<p>i. Stitching guideline marking specified</p> <p>ii. Fly facing placement onto fly front of pants (right side facing)</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>method and technique</p> <ul style="list-style-type: none"> • Run stitch fly facing to front panel • Marks stitching guideline on right side of left front panel • Top stitch left fly front along marked line • Place zipper tape onto fly catch (if applicable) • Edgestitch fly of right front panel • Runstitch a crotch seam • Stitch a triangular shape to strengthened attached fly <p>v. Attached Fly finished appearance</p> <ul style="list-style-type: none"> • Neatly slashed/trimmed and unsightly threads removed • Fly opening dimension as per specifications • Shape in place • No foreign materials from fabric • Measurements accuracy 	<p>v. Check attached fly shape and condition appearance</p>	<p>process of sewing</p> <p>iii. Apply correct coordination between eyes and left –right hand motion</p> <p>iv. Both hands and fingers must be flexible when operating tiny parts</p> <p>v. Adhere to quality standards requirements</p> <p>vi. Always practice good housekeeping inclusive personal hygiene</p> <p><u>Safety:</u></p> <p>i. Wear PPE during operation</p> <p>i. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designa</p>	<p><u>Related Skill</u></p> <p>16</p>	<p><u>Related Skill</u></p> <p>Demonstration Observation</p>	<p>demonstrated</p> <p>iii. Utilization of sewing tools and equipment demonstrated</p> <p>iv. Fly sewing process demonstrated according to sewing method and technique</p> <p>v. Attached fly shape and condition appearance explained according to pants specifications and quality standards requirements</p> <p>vi. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all times</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
			<p>ted area</p> <p>ii. Adhere to safety requirements in handling hot/sharp items</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures when handling hazardous materials</p>			
5. Carry out pants bodice piece attachment	<p>i. Front and back trouser panel opening measurement</p> <p>ii. Back bodice piece preparation procedure, method and technique:</p> <ul style="list-style-type: none"> • Sew back darts (right and left piece) • Press/iron darts (face towards centre back) <p>iii. Side seams closing procedure, method and technique:</p> <ul style="list-style-type: none"> • Place both right 	<p>i. Determine front and back trouser panel opening measurement</p> <p>ii. Utilise sewing tools and equipment</p> <p>iii. Execute back bodice piece preparation process</p> <p>iv. Execute side seams closing process</p> <p>v. Execute in seams closing process</p> <p>vi. Execute centre back seams closing process</p> <p>vii. Follow side seam ,</p>	<p><u>Attitude:</u></p> <p>i. Concentrate on sewing path and position</p> <p>ii. Apply both hands in a flexible manners during process of sewing</p> <p>iii. Apply correct coordination between eyes and left –right</p>	<p><u>Related Knowledge</u></p> <p>5</p> <p><u>Related Skill</u></p> <p>11</p>	<p><u>Related Knowledge</u></p> <p>Lecture Question and Answer Group Discussion</p> <p><u>Related Skill</u></p> <p>Demonstration Observation</p>	<p>i. Front and back trouser panel opening measurement specified</p> <p>ii. Back bodice piece preparation process demonstrated</p> <p>iii. Side seams closing process demonstrated</p> <p>iv. In seams closing</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>front and back panels (notches match at hips, knee and hem)</p> <ul style="list-style-type: none"> • Run stitch alongside seam • Bartack at the end of stitching • Press side seam open with hot press/iron <p>iv. Sewing tools and equipment handling technique</p> <p>v. In seams closing procedure, method and technique:</p> <ul style="list-style-type: none"> • Match notches of front and back piece at knee and hem • Stitch through two layers of materials • Press in seam open <p>vi. Centre back seams closing procedure, method and technique:</p> <ul style="list-style-type: none"> • Attach waistband • Sew front and back rise until trouser leg (over locking) • Press open stitch seam from crotch to waistband • Stitch catch lining to pants 	<p>inseam and centre back sewing guidelines</p> <p>viii. Determine label specifications and sewing position</p> <p>ix. Check pants bodice piece finished appearance</p>	<p>hand motion</p> <p>iv. Adhere to quality standards requirements</p> <p>v. Always practice good housekeeping inclusive personal hygiene</p> <p><u>Safety:</u></p> <p>i. Wear PPE during operation</p> <p>ii. Sharp tools such as cutting tools always kept in safe place/ designated area</p> <p>iii. Adhere to safety requirements in handling hot/sharp items</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures when handling hazardous</p>			<p>process demonstrated</p> <p>v. Centre back seams closing process demonstrated</p> <p>vi. Side seam , inseam and centre back sewing guidelines explained and demonstrated during sewing operation</p> <p>vii. Label specifications and sewing position specified</p> <p>viii. Pants bodice piece finished appearance explained according to pants specifications and quality standards requirements</p> <p>ix. Work area , personal hygiene, Health, Safety, Environment</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>vii. Side seam , inseam and centre back sewing guidelines:</p> <ul style="list-style-type: none"> • Check notches of both pieces correctly matched before start stitch (to avoid misalignment) • Do not stretch or push materials to match notches(to avoid unsightly features in finished seam) <p>viii. Label specifications and sewing position</p> <p>ix. Attached pants bodice appearance and defect checking method</p> <p>ix. Attached pants bodice finished appearance</p> <ul style="list-style-type: none"> • measurement accuracy (symmetrical) • No unsightly features 		materials			(HSE) requirements and good housekeeping practised at all times
6. Carry out pants bottom hemming	<p>i. Pants bottom hem sewing position</p> <p>ii. Pants bottom hemming measurement accuracy (both legs)</p> <p>iii. Sewing tools and equipment handling</p>	<p>i. Determine pants bottom hem sewing position</p> <p>ii. Check pants bottom hemming measurement accuracy (both legs)</p> <p>iii. Utilise sewing tools</p>	<p><u>Attitude:</u></p> <p>i. Concentrate on sewing path and position</p> <p>ii. Apply both hands during in a flexible</p>	<p><u>Related Knowledge</u></p> <p>5</p>	<p><u>Related Knowledge</u></p> <p>Lecture Question and Answer Group Discussion</p>	<p>i. Sewing position of pants bottom hem specified</p> <p>ii. Measurement accuracy (both legs) of pants bottom</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	iv. technique Pants bottom hemming procedure, method and technique <ul style="list-style-type: none"> • Turn pants leg (show creased bottom) • Blindstitch bottom hem (starting at in seam) v. Pants bottom hemming appearance and defect checking method	and equipment iv. Execute pants bottom hemming process v. Check pants bottom hemming finished appearance vi. Detect type of defective stitching vii. Categorise defects, causes and sewing assembly defects details viii. Report discrepancies /defects findings to superior	manner process of sewing iii. Apply correct coordination between eyes and left –right hand motion iv. Adhere to quality standards requirements v. Always practice good housekeeping inclusive personal hygiene <u>Safety:</u> i. Wear PPE during operation ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area iii. Adhere to safety requirements	<u>Related Skill</u> 11	<u>Related Skill</u> Demonstration Observation	hemming demonstrated iii. Utilization of sewing tools and equipment demonstrated iv. Pants bottom hemming process demonstrated according to sewing method and technique v. Pants bottom hemming finished appearance explained according to pants specifications vi. Type of defective stitching listed and causes specified according to quality standards requirements vii. Pants bottom hemming sewing defects categorised and details

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	as: <ul style="list-style-type: none"> • Machine • Materials • Human • Method ix. Type of sewing/ assembly defects: <ul style="list-style-type: none"> • Stitching/seams: <ul style="list-style-type: none"> ○ Tight or loose tension, skipped or broken stitches affecting serviceability/durability ○ Needle cut, nick, needle pull or visible abrasion caused by needles ○ Foreign objects embedded in seams ○ Broken stitch in seam or decorative stitching ○ Any dropped stitch in a non-locking seam ○ Two or more consecutive skipped stitches on a seaming or 		in handling hot/sharp items <u>Environmental:</u> i. Adhere to environmental procedures when handling hazardous materials			listed according to quality standards references, manuals and procedures viii. Discrepancies /defects findings reported to superior for further action according to reporting procedure and quality standard requirements ix. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all times

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p style="text-align: center;">joining lock stitch</p> <ul style="list-style-type: none"> • Measurement exceeding +- tolerance <p>x. Discrepancies /defects findings reporting procedure and method:</p> <ul style="list-style-type: none"> • Verbally • Written <p>xi. Quality standards requirements such as:</p> <ul style="list-style-type: none"> • Concept of “right the first time” /No defects/ defective • Measurement accuracy <p>xii. Quality standard references, manuals and procedures such as:</p> <ul style="list-style-type: none"> • Visual Defect Reference Guide • Apparel Defect Classification Manual • Job specifications • Accessories card/buyer special requirements manual • Defects work repair/rework procedure 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria

Employability Skills

Core Abilities	Social Skills
01.01 Identify and gather information 01.02 Document information, procedures or processes 01.04 Analyze information 01.06 Utilize word processor to process information 02.01 Interpret and follow manuals, instructions and SOP's 02.03 Communicate clearly 02.04 Prepare brief reports and checklists using standard forms 03.01 Apply cultural requirements to the workplace 03.02 Demonstrate integrity and apply ethical practices 03.03 Accept responsibility for own work and work area 03.05 Demonstrate safety skills 03.06 Respond appropriately to people and situations 04.01 Organize own work activities 04.02 Set and revise own objectives and goals 04.03 Organize and maintain own workplace 04.05 Demonstrate initiative and flexibility	1. Communication skills 2. Conceptual skills 3. Interpersonal skills 4. Learning skills 5. Leadership skills 6. Multitasking and prioritising 7. Self-discipline 8. Teamwork

Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. Sample of company documentation procedure (Job order sheet, Job specifications sheet, Standard Operating Procedure, measuring manual)	1:1
2. Quality Standard reference, manuals and procedures (Visual Defect Reference Guide, Apparel Defect Classification Manual, Accessories card/buyer special requirements manual, Defects work repair/rework procedure)	1:1
3. Production apparel sample	1:25
4. Sample of fabric	As per required
5. Sample of pants bodice cut pieces (fly, front and back bodice)	As per required
6. Work station/table with adjustable chairs	1:5
7. Sewing machine (lockstitch, overlock, blindstitch)	1:5
8. Sewing machine component (needles, threads stands, bobbin, bobbin case, Machine safety devices (needle guard, wheel/belt cover)	1:5
9. Sample of machine operating manual	1:25
10. Sewing materials (interlining, threads, zipper, button,etc)	As per required
11. Dummy model	1:25
12. Sewing tools (tweezers, scissors, measuring tape/marketing device)	1:1
13. Equipment (hot press/iron/ironing table)	1:5
14. Personal Protective Equipment (PPE) (gloves, safety mask, apron, etc)	1:1

REFERENCES

1. Betsy Hosegood eds. (2006), Complete of Sewing, Darling Kindersley Limited London, ISBN 13, 978-1-4053-1295-0
2. Claire Shaeffer, Sewing for the Apparel Industry (2nd Edition), (2012), ISBN 978-0131884434
3. Clifford L Blodget (2013), The Sewing Machine Master Guide: From Basic to Expert, Blodget Publishing, LLC, ISBN 978-0-9900227-2-5
4. Denham, Carolyn (2014), Elementary Sewing Skills from Merchant & Mills, Collins & Brown, ISBN 9781909397415
5. Dorothy Wood (2002) Sewing Skills & Techniques, Lorenz Books, ISBN 878-923160800-0
6. E. Drudi (2002) Figure Drawing For Fashion Design, Pepin Press Publisher, ISBN 978-9054960805

7. Janine Manslow Kathryn Mclelvey, 2002, Fashion Design Process, Innovation & Practice- Blackwell ISBN 0-632-05599-5
8. Maurice J. Johnson, Evelyn C. Moore (2001), Apparel Product Development, Second Edition, Prentice Hall, New Jersey, ISBN 0-13-025439-8
9. Myra Coles (1999), The Sewing Machine Book, Hutchinson and Co. (Publishers) Ltd, ISBN 0-09-173009-0
10. Pati palmer, Gail Brown, (2004), Sewing with Sergers: The Complete Handbook for Overlock Sewing (Serging . . . from Basics to Creative Possibilities series), A Palmer/Pletsch Publication ISBN 978 0935278255
11. Phyllis G. Tortora, Robert S. Merkel (2007), Fairchilds's Dictionary of Textiles, 7th Edition, Fairchild Publications New York, ISBN 1-87005-707-3

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Skirt type <ul style="list-style-type: none"> ○ A-Line Skirt ○ Mermaid Skirt ○ Gypsy/Tiered Skirt ○ Pencil Skirt ○ Flared Skirt ○ Mini Skirt ○ Bustle Skirt ○ Maxi Skirt ○ Pleated Skirt ○ Circle Skirt ○ Wrap Skirt ○ Poodle Skirt ○ Gathered Skirt • Size <ul style="list-style-type: none"> ○ Alphabets (S,M,L,XL) ○ Number (1,2,3,4) • Buyer code • Style • Sketch • Measurement method <p>iii. Skirt measuring data from buyer measuring manual</p> <p>iv. Production approved apparel sample</p> <p>v. Materials specifications:</p> <ul style="list-style-type: none"> • Fabric type <ul style="list-style-type: none"> ○ French terry ○ taffeta ○ single jersey ○ cotton 	<p>materials</p> <p>vii. Interpret skirt specifications</p> <p>viii. Determine skirt sewing method and technique</p>				<p>v. Materials specifications specified</p> <p>vi. Defects on materials categorised</p> <p>vii. Skirt specifications specified</p> <p>viii. Skirt sewing method and technique described according to apparel type</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> ○ woven ● Fabric texture <ul style="list-style-type: none"> ○ Light ○ Heavy ○ Smooth ○ coarse) ● Colour shading ● Thread specifications <ul style="list-style-type: none"> ○ Size/ticket number ○ Length ○ Colour ● Labels <ul style="list-style-type: none"> ○ Size (S,M,L,XL /1,2,3,4) ○ Brand ○ Washable/non-washable ○ Country origin code vi. Defects on materials such as: <ul style="list-style-type: none"> ● Fabric/materials <ul style="list-style-type: none"> ○ Knots ○ Double thick or thin yarns ○ Picks and holes ○ Loom Start Marks ○ Fabric Moire ○ Soiled filling ○ Corrugation ○ Dye spots, streaks or smears ○ Knitted in, foreign or 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> coloured thread (off colour fly) ○ Snags, pulls in fabric ● Colour <ul style="list-style-type: none"> ○ Shade to shade panel ○ Wash/Finish Outside of Approved Shade band ● Dirt/Oil <ul style="list-style-type: none"> ○ Strong smell due to wash finish and/or residue ○ Non-removable stain ○ Removable stain <p>vii. Skirt specifications such as:</p> <ul style="list-style-type: none"> ● Bodice parts (front, back panel/piece) ● Shape ● Style ● Dimension <ul style="list-style-type: none"> ○ Length ○ Width ○ Opening ● Measurement tolerance (+/-) ● Colours ● Accessories (zipper, buttons) ● Decorative items (lace, ribbons, 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>iii. Sewing method and technique</p> <p> (iii. Sewing method and technique)</p>					
2. Prepare skirt bodice attachment requirements	<p>i. Work area, personal hygiene, health and safety requirements such as:</p> <ul style="list-style-type: none"> • Workplace cleanliness and tidiness • Personal appearances <ul style="list-style-type: none"> ○ Neat hairstyle/ covered ○ Body parts clean and tidy ○ Without jewellery • Company uniform/dress code policy • Utilization of Personal Protective Equipment (PPE): <ul style="list-style-type: none"> ○ safety mask ○ glove (for white fabric) ○ covered low-heeled shoes ○ Safety glasses • Ergonomic department: <ul style="list-style-type: none"> ○ Right body posture (sitting) 	<p>i. Check work area, personal hygiene, health and safety requirements</p> <p>ii. Check work station/machine table and sewing tools setting</p> <p>iii. Adjust chair height and distance from working table</p> <p>iv. Identify types of sewing machine</p> <p>v. Identify types of machine component</p> <p>vi. Check machine specifications and functions setting</p> <p>vii. Identify types of sewing tools and equipment</p> <p>viii. Determine skirt seam allowances measurement</p> <p>ix. Identify Art specifications</p> <p>x. Identify Decoration design line</p> <p>xi. Arrange materials on work station</p>	<p><u>Attitude:</u></p> <p>i. Resourceful in identifying tools, and materials</p> <p>ii. Adhere to work organization method and work procedure</p> <p><u>Safety:</u></p> <p>i. Sharp tools such as scissors, tweezers always tied up to work station and needles kept in place</p> <p>ii. Always work in proper lighting at workstation</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures</p>	<p><u>Related Knowledge</u></p> <p>1</p> <p><u>Related Skill</u></p> <p>3</p>	<p><u>Related Knowledge</u></p> <p>Lecture Question and Answer</p> <p><u>Related Skill</u></p> <p>Demonstration Observation</p>	<p>i. Work area, personal hygiene, health and safety requirements specified and safety practices demonstrated</p> <p>ii. Work station/machine table and sewing tools setting specified according to work flow</p> <p>iii. Chair height and distance from working table adjusted according to ergonomic department requirements</p> <p>iv. Types of sewing machine and components listed</p> <p>v. Machine specifications</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> position) kept securely <ul style="list-style-type: none"> ○ Proper body posture when lifting heavy materials ii. Work station/ machine setting : <ul style="list-style-type: none"> ● Arrangement ● Condition ● Height iii. Adjustable chairs for personnel sitting positions: <ul style="list-style-type: none"> ● height ● distance from workstation ● back seats support iv. Types of sewing machine such as: <ul style="list-style-type: none"> ● Lockstitch <ul style="list-style-type: none"> ○ Single needle ○ Double needle ● Blindstitch ● Over lock v. Types of machine component such as: <ul style="list-style-type: none"> ● Needles ● Threads stands ● Bobbin ● Bobbin case ● Machine safety devices (needle guard, wheel/ belt cover) vi. Machine specifications 		<ul style="list-style-type: none"> when handling hazardous chemical/additive materials 			<ul style="list-style-type: none"> and functions setting described vi. Types of sewing tools and equipment listed and functions described xiv. Skirt seam allowances measurement specified xi. Art specifications specified xii. Decoration design line listed vii. Materials inclusive cut pieces arrangement on work station demonstrated according to Standard Operating Procedure

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>and functions setting such as:</p> <ul style="list-style-type: none"> • Thread tension • Production specifications requirements such as: <ul style="list-style-type: none"> ○ Stitch per inch (SPI) ○ Speed <p>vii. Types of sewing tools and equipment such as:</p> <ul style="list-style-type: none"> • Tweezers • Scissors • Measuring marking device/tape • Equipment: <ul style="list-style-type: none"> ○ Steam press ○ Iron ○ Ironing table <p>viii. Skirt seam allowances measurement</p> <p>ix. Decorative effect:</p> <ul style="list-style-type: none"> • Darts • Seam • Pleats • Tucks • gathering • Piping and binding • Materials (embroidery, logos, label, tapes) <p>x. Art specifications:</p> <ul style="list-style-type: none"> • Position • Sizes 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> Texture xi. Decoration design line xii. Materials arrangement					
3. Attach skirt front and back bodice piece	i. Darts, pleats, gathers placement of back and front bodice piece ii. Back and front bodice piece preparation procedure, method and technique: <ul style="list-style-type: none"> Fold darts, pleats, gathers Sew back darts, pleats, gathers Press/iron darts iii. Skirt side seams closing procedure, method and technique: <ul style="list-style-type: none"> Place both right front and back pieces (notches match at hips and and hem) Run stitch alongside seam (single needle) Bartack at the end of stitching Press side seam open with hot press/iron iv. Skirt bottom measurement accuracy (both pieces)	i. Check darts, pleats, gathers placement of back and front bodice piece ii. Execute Back and front bodice piece preparation process iii. Execute skirt side seams closing process iv. Check skirt bottom measurement accuracy v. Utilise sewing tools and equipment vi. Execute skirt bottom hemming process vii. Check attached skirt finished appearance	<u>Attitude:</u> i. Focused in handling job ii. Apply both hands during in a flexible manner process of sewing iii. Adhere to skirt front and back bodice piece attachment procedure iv. Adhere to quality standards requirements v. Always practice good housekeeping inclusive personal hygiene <u>Safety:</u> i. Wear PPE during operations ii. Sharp tools such as cutting tools	<u>Related Knowledge</u> 2 <u>Related Skill</u> 6	<u>Related Knowledge</u> Lecture Question and Answer Group Discussion <u>Related Skill</u> Demonstration Observation	i. Darts, pleats, gathers placement of back and front bodice piece specified ii. Utilization of sewing tools and equipment demonstrated iii. Back and front bodice piece preparation process demonstrated iv. Skirt side seams closing process demonstrated v. Skirt bottom measurement accuracy demonstrated vi. Skirt bottom hemming process demonstrated according to sewing method and technique vii. Attached skirt finished

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	v. Sewing tools and equipment handling technique vi. Skirt bottom hemming procedure, method and technique <ul style="list-style-type: none"> • Turn skirt bodice(show creased bottom) • Over lock skirt bottom hem vii. Attached skirt finished appearance and defect checking method viii. Attached skirt finished appearance <ul style="list-style-type: none"> • Neatly slashed/trimmed and unsightly threads removed • No foreign materials from fabric • Measurement tolerance 		and hazardous chemical always kept in safe place/ designated area iii. Adhere to safety requirements in handling hot/sharp items iv. Follow electrical components safety instructions <u>Environmental:</u> i. Adhere to environmental procedures when handling hazardous materials			appearance explained according to skirt specifications and to quality standards requirements iii. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all times
4. Carry out skirt creative artwork and decoration	i. Creative artwork and decoration specifications ii. Artwork and decoration requirements : <ul style="list-style-type: none"> • Fastenings <ul style="list-style-type: none"> ○ Eyelet ○ Button and button hole 	i. Check creative artwork and decoration specifications ii. Comply with artwork and decoration requirements iii. Determine Artwork and decorative	<u>Attitude:</u> i. Focused in handling job ii. Apply both hands during in a flexible manner process of sewing	<u>Related Knowledge</u> 7	<u>Related Knowledge</u> Lecture Question and Answer Group Discussion	i. Creative artwork and decoration specifications described ii. Artwork and decoration requirements complied

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> ○ Snaps ○ Hooks and eye ○ Buckles ○ Velcro ● Decorative materials: <ul style="list-style-type: none"> ○ Label ○ Tapes ○ Ribbon ○ Laces ○ Drawstring <p>iii. Artwork and decorative materials placement and alignment on marking</p> <p>iv. Sewing tools and equipment handling technique</p> <p>v. Skirt creative artwork and decoration procedure, method and technique</p>	<p>materials placement and alignment on marking</p> <p>iv. Utilise sewing tools and equipment</p> <p>v. Execute skirt creative artwork and decoration process</p>	<p>iii. Apply correct coordination between eyes and left –right hand motion</p> <p>iv. Adhere to Skirt creative artwork and decoration procedure</p> <p>v. Adhere to quality standards requirements</p> <p>vi. Always practice good housekeeping inclusive personal hygiene</p> <p><u>Safety:</u></p> <p>i. Wear PPE during operations</p> <p>ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area</p> <p>iii. Adhere to safety</p>	<p><u>Related Skill</u></p> <p>17</p>	<p><u>Related Skill</u></p> <p>Demonstration Observation</p>	<p>iii. Utilization of sewing tools and equipment demonstrated</p> <p>iv. Artwork and decorative materials placement and alignment on marking demonstrated</p> <p>v. Skirt creative artwork and decoration process demonstrated</p> <p>vi. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all times</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
			requirements in handling hot/sharp items iv. Follow electrical components safety instructions <u>Environmental:</u> i. Adhere to environmental procedures when handling hazardous chemical/additive materials			
5. Check skirt bodice output	i. Skirt appearance and defect checking method ii. Skirt finished appearance such as: <ul style="list-style-type: none"> • Artwork and decoration suitability • Thread trim • Front and back bodice dimension accuracy • No foreign materials from fabric iv. Discrepancies in	i. Check Skirt finished appearance and defect ii. Check discrepancies in measurement iii. Detect type of defective stitching iv. Categorise defects, causes and sewing assembly defects details v. Report discrepancies /defects findings to superior	<u>Attitude:</u> i. Precise in measuring parts ii. Details and thorough in inspecting cut materials iii. Adhere to quality standards requirements iv. Always practice good housekeeping inclusive	<u>Related Knowledge</u> 6 <u>Related Skill</u> 14	<u>Related Knowledge</u> Lecture Question and Answer Group Discussion <u>Related Skill</u> Demonstration Observation	i. Skirt finished appearance and defect explained according to job specifications and quality standards requirements ii. Type of defective stitching listed and causes specified according to quality

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>measurement</p> <p>v. Type of defective stitching such as:</p> <ul style="list-style-type: none"> • Puckering (ugly wrinkles) • Wobbling stitch (irregular stitching) • Stitch skipping (stitches sometimes skip) <p>vi. Defect category such as:</p> <ul style="list-style-type: none"> • Machine • Materials • Human • Method <p>vii. Type of sewing/assembly defects:</p> <ul style="list-style-type: none"> • Stitching/Seams <ul style="list-style-type: none"> ○ Tight or loose tension, skipped or broken stitches affecting serviceability/durability ○ Needle cut, nick, needle pull or visible abrasion caused by needles ○ Foreign objects embedded in 		<p>personal hygiene</p> <p><u>Safety:</u></p> <p>i. Adhere to safety requirements during appearance and defect checking</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures when handling hazardous materials</p>			<p>standards requirements</p> <p>iii. Skirt sewing defects categorised and details listed according to quality standards references, manuals and procedures</p> <p>iv. Discrepancies /defects findings reported to superior for further action according to reporting procedure and quality standard requirements</p> <p>v. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all times</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>seams</p> <ul style="list-style-type: none"> ○ Broken stitch in seam or decorative stitching ○ Any dropped stitch in a non-locking seam ○ Two or more consecutive skipped stitches on a seaming or joining lock stitch ● Measurement exceeding +- tolerance <p>viii. Discrepancies /defects findings reporting procedure and method:</p> <ul style="list-style-type: none"> ● Verbally ● Written <p>ix. Quality standards requirements such as:</p> <ul style="list-style-type: none"> ● Concept of “right the first time” /No defects/ defective ● Measurement accuracy <p>x. Quality standard references, manuals and procedures such as:</p> <ul style="list-style-type: none"> ● Visual Defect Reference Guide ● Apparel Defect 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	Classification Manual <ul style="list-style-type: none"> • Job specifications • Accessories card/buyer special requirements manual • Defects work repair/rework procedure 					

Employability Skills

Core Abilities	Social Skills
01.01 Identify and gather information 01.02 Document information, procedures or processes 01.04 Analyze information 01.06 Utilize word processor to process information 02.01 Interpret and follow manuals, instructions and SOP's 02.03 Communicate clearly 02.04 Prepare brief reports and checklists using standard forms 03.01 Apply cultural requirements to the workplace 03.02 Demonstrate integrity and apply ethical practices 03.03 Accept responsibility for own work and work area 03.05 Demonstrate safety skills 03.06 Respond appropriately to people and situations 04.01 Organize own work activities 04.02 Set and revise own objectives and goals 04.03 Organize and maintain own workplace 04.05 Demonstrate initiative and flexibility	1. Communication skills 2. Conceptual skills 3. Interpersonal skills 4. Learning skills 5. Leadership skills 6. Multitasking and prioritising 7. Self-discipline 8. Teamwork

Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. Sample of company documentation procedure (Job order sheet, Job specifications sheet, Standard Operating Procedure, measuring manual)	1:1
2. Quality Standard reference, manuals and procedures (Visual Defect Reference Guide, Apparel Defect Classification Manual, Accessories card/buyer special requirements manual, Defects work repair/rework procedure)	1:1
3. Production apparel sample	1:25
4. Sample of fabric	As per required
5. Sample of skirt bodice cut pieces (front and back bodice)	As per required
6. Work station/table with adjustable chairs	1:5
7. Sewing machine (lockstitch, overlock)	1:5
8. Sewing machine component (needles, threads stands, bobbin, bobbin case, Machine safety devices (needle guard, wheel/belt cover))	1:5
9. Sample of machine operating manual	1:25
10. Sewing materials (interlining, threads, zipper, button, etc)	As per required
11. Sewing decorative materials (ribbons, lace, tape, embroideries)	As per required
12. Dummy model	1:25
13. Sewing tools (tweezers, scissors, measuring tape/marketing device)	1:1
14. Equipment (hot press/iron/ironing table)	1:5
15. Personal Protective Equipment (PPE) (gloves, safety mask, apron, etc)	1:1

REFERENCES

1. Betsy Hosegood eds. (2006), Complete of Sewing, Darling Kindersley Limited London, ISBN 13, 978-1-4053-1295-0
2. Claire Shaeffer, Sewing for the Apparel Industry (2nd Edition), (2012), ISBN 978-0131884434
3. Clifford L Blodget (2013), The Sewing Machine Master Guide: From Basic to Expert, Blodget Publishing, LLC, ISBN 978-0-9900227-2-5
4. Denham, Carolyn (2014), Elementary Sewing Skills from Merchant & Mills, Collins & Brown, ISBN 9781909397415
5. Dorothy Wood (2002) Sewing Skills & Techniques, Lorenz Books, ISBN 878-923160800-0

6. E. Drudi (2002) Figure Drawing For Fashion Design, Pepin Press Publisher, ISBN 978-9054960805
7. Janine Manslow Kathryn Mclelvey, 2002, Fashion Design Process, Innovation & Practice- Blackwell ISBN 0-632-05599-5
8. Maurice J. Johnson, Evelyn C. Moore (2001), Apparel Product Development, Second Edition, Prentice Hall, New Jersey, ISBN 0-13-025439-8
9. Myra Coles (1999), The Sewing Machine Book, Hutchinson and Co. (Publishers) Ltd, ISBN 0-09-173009-0
10. Pati palmer, Gail Brown, (2004), Sewing with Sergers: The Complete Handbook for Overlock Sewing (Serging . . . from Basics to Creative Possibilities series), A Palmer/Pletsch Publication ISBN 978 0935278255
11. Phyllis G. Tortora, Robert S. Merkel (2007), Fairchilds's Dictionary of Textiles, 7th Edition, Fairchild Publications New York, ISBN 1-87005-707-3
12. Wendy Gardiner, Lorna Knight (2011), The Sewing Machine Accessory Bible: Get the Most Out of Your Machine---From Using Basic Feet to Mastering Specialty Feet, Quarto Publishing ISBN 978-0-312-67658-2

CURRICULUM of COMPETENCY UNIT (CoCU)

SECTOR		TEXTILE & APPAREL						
SUB SECTOR		APPAREL MANUFACTURING						
JOB AREA		MASS PRODUCTION (SEWING SECTION)						
NOSS TITLE		SEWING OPERATION						
COMPETENCY UNIT TITLE		APPAREL ACCESSORIES SEWING OPERATION						
LEARNING OUTCOME		<p>The person who is competent in this competency unit shall be able to create, attach and sew apparel accessories such as zipper, button and eyelet as per requirements and designs in accordance with specifications, apparel accessories sewing technique and Standard Operating Procedure (SOP). Upon completion of this competency unit, trainees will be able to:-</p> <ul style="list-style-type: none"> • Prepare apparel accessories sewing operation requirements • Create waistband • Attach zipper • Create button hole • Attach button • Create eyelet hole • Attach eyelet 						
PRE-REQUISITE (if applicable)		C01						
COMPETENCY UNIT ID		TA-020-2: 2014-C10	LEVEL	2	TRAINING DURATION	70 hours	SKILL CREDIT	7.0
Work Activities	Related Knowledge	Related Skills		Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria	
1. Prepare apparel accessories sewing operation requirements	i. Work area, personal hygiene, health and safety requirements such as: <ul style="list-style-type: none"> • Workplace cleanliness and tidiness • Personal appearances • Company 	i. Check work area, personal hygiene, health and safety requirements ii. Identify job order information iii. Interpret job specifications iv. Check production approved apparel sample		<u>Attitude:</u> i. Thorough in interpreting and inquisitive in clarifying job order ii. Detailed in checking product specifications iii. Resourceful in	<u>Related Knowledge</u> 2 <u>Related Skill</u> 6	<u>Related Knowledge</u> Lecture Question and Answer <u>Related Skill</u> Demonstration Observation	i. Work area, personal hygiene, health and safety requirements specified and safety practices demonstrated ii. Job order	

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> uniform/dress code policy • Utilization of Personal Protective Equipment (PPE): • Ergonomic department: • Work station/ machine setting • Adjustable chairs for personnel sitting positions • Work organization method (5S) <p>ii. Job order information such as:</p> <ul style="list-style-type: none"> • Delivery date • Quantity • Batch number • Colour • Special requirements – accessories (zipper, button, eyelet) <p>iii. Job specifications such as:</p> <ul style="list-style-type: none"> • Apparel type: <ul style="list-style-type: none"> ○ Pants ○ Skirt • Size <ul style="list-style-type: none"> ○ Alphabets (S,M,L,XL) ○ Number (1,2,3,4) • Buyer code 	<ul style="list-style-type: none"> v. Identify materials specifications vi. Identify defects on materials vii. Arrange materials on work station viii. Interpret Quality Standard requirements ix. Identify Quality Standard references 	<ul style="list-style-type: none"> locating and arranging tools, equipment and materials iv. Adhere to work organization method and work procedure <p><u>Safety:</u></p> <ul style="list-style-type: none"> i. Wear PPE during operations ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/ designated area iii. Adhere to safety requirements in handling hot items <p><u>Environmental:</u></p> <ul style="list-style-type: none"> i. Adhere to environmental procedures when 			<ul style="list-style-type: none"> information specified iii. Job specifications listed iv. Production approved apparel sample specified v. Materials specifications specified vi. Defects on materials categorised vii. Materials inclusive cut pieces arrangement on work station demonstrated according to Standard Operating Procedure iii. Quality Standard requirements described ix. Relevant documents on quality standard references, manuals and procedures

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Style • Sketch • Measurement method iv. Accessories placement measuring data from buyer measuring manual v. Production approved apparel sample vi. Materials specifications: <ul style="list-style-type: none"> • Fabric type <ul style="list-style-type: none"> ○ French terry ○ Taffeta ○ Single jersey ○ Cotton ○ Woven • Fabric texture <ul style="list-style-type: none"> ○ Light ○ Heavy ○ Smooth ○ coarse) • Colour shading • Thread specifications <ul style="list-style-type: none"> ○ Size/ticket number ○ Length ○ Colour • Interlining <ul style="list-style-type: none"> ○ Type (fusible /infusible) ○ Measurements • Elastic/stretch band • Accessories 		<p>handling hazardous materials</p>			<p>listed and usage listed</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> fasteners <ul style="list-style-type: none"> ○ Type (Zipper, Buckle, Buttons, Eyelet) ○ Safety requirements (no sharp edge, non lead materials) ○ Country standards vii. Defects on materials such as: <ul style="list-style-type: none"> ● Fabric/materials <ul style="list-style-type: none"> ○ Knots ○ Double thick or thin yarns ○ Picks and holes ○ Loom Start Marks ○ Dye spots, streaks or smears ○ Knitted in, foreign or coloured thread (off colour fly) ○ Snags, pulls in fabric ● Colour <ul style="list-style-type: none"> ○ Shade to shade panel ○ Wash/Finish Outside of Approved Shade band ● Dirt/Oil <ul style="list-style-type: none"> ○ Strong smell 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>due to wash finish and/or residue</p> <ul style="list-style-type: none"> ○ Non-removable stain ○ Removable stain <p>viii. Materials arrangement on work station</p> <p>ix. Quality standards requirements such as:</p> <ul style="list-style-type: none"> ● Concept of “right the first time” /No defects/ defective ● Measurement accuracy <p>x. Relevant documents on quality standard references, manuals and procedures such as:</p> <ul style="list-style-type: none"> ● Visual Defect Reference Guide ● Apparel Defect Classification Manual ● Accessories card/buyer special requirements manual ● Defects work repair/rework procedure ● Standard Operating Procedure (SOP) 					

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
2. Create waistband	i. Waistband specifications: <ul style="list-style-type: none"> • Types : <ul style="list-style-type: none"> ○ Separate cut piece (with/without interlining) ○ Self fabric ○ Stretch/ elastic • Size • Shape ii. Types of sewing machine such as: <ul style="list-style-type: none"> • 2,3 and 4 needles lockstitch • Over lock iii. Types of machine component such as: <ul style="list-style-type: none"> • Needles • Threads stands • Bobbin • Bobbin case • Machine safety devices (needle guard, wheel/ belt cover) iv. Machine specifications and functions setting such as: <ul style="list-style-type: none"> • Thread tension • Production specifications requirements such as: <ul style="list-style-type: none"> ○ Stitch per inch (SPI) ○ Speed 	i. Check waistband specifications ii. Identify types of sewing machine iii. Identify types of machine component iv. Check machine specifications and functions setting v. Identify types of sewing tools and equipment vi. Utilise sewing tools and equipment vii. Execute waistband materials preparation process viii. Execute waistband preparation and attachment process ix. Check waistband appearance and defects x. Detect type of defective stitching xi. Categorise defects, causes and sewing assembly defects details xii. Report discrepancies /defects findings to superior	<u>Attitude:</u> i. Focus in handling job ii. Apply both hands during in a flexible manner process of sewing iii. Apply correct coordination between eyes and left –right hand motion iv. Adhere to waistband preparation and attachment procedure v. Adhere to quality standards requirements vi. Always practice good housekeeping inclusive personal hygiene <u>Safety:</u> i. Wear PPE during operations ii. Sharp tools such as	<u>Related Knowledge</u> 5 <u>Related Skill</u> 11	<u>Related Knowledge</u> Lecture Question and Answer <u>Related Skill</u> Demonstration Observation	i. Waistband specifications specified ii. Types of sewing machine and components listed iii. Machine specifications and functions setting described iv. Types of sewing tools and equipment listed and functions described v. Utilization of sewing tools and equipment demonstrated vi. Materials preparation demonstrated vii. Waistband preparation and attachment process demonstrated viii. Attached waistband appearance explained

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>v. Types of sewing tools and equipment such as:</p> <ul style="list-style-type: none"> • Tweezers • Scissors/shears • Measuring marking device/tape • Equipment: <ul style="list-style-type: none"> ○ Steam press ○ Iron ○ Ironing table <p>vi. Sewing tools and equipment handling technique</p> <p>vii. Materials preparation</p> <ul style="list-style-type: none"> • Unfold/ unroll for readymade waistband • Arrange at workstation • Set <p>viii. Waistband preparation and attachment procedure, method and technique</p> <ul style="list-style-type: none"> • Attach fusible/non-fusible interlining to top band (single/ separate pieces) • Stitch waistband fabrics • Attach prepared waistband to apparel waistline • Prepare belt loop (if applicable) 		<p>cutting tools and hazardous chemical always kept in safe place/designated area</p> <p>iii. Adhere to safety requirements in handling hot/sharp items</p> <p>iv. Follow electrical components safety instructions</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures when handling hazardous materials</p>			<p>according to waistband specifications and quality standards requirements</p> <p>ix. Attached waistband defects categorised and details listed according to quality standards references, manuals and procedures</p> <p>x. Discrepancies /defects findings reported to superior for further action according to reporting procedure and quality standard requirements</p> <p>xi. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/ Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Set prepared belt loop onto waistband ix. Waistband appearance and defects checking method such as: <ul style="list-style-type: none"> • Visual • Measure • Test on model/ mannequin or use tester x. Waistband finished appearance such as: <ul style="list-style-type: none"> • Neatly slashed/trimmed and unsightly threads removed • Uneven in width • Closure misaligned • Excessive fullness, puckering or twisting • Strength • Measurement accuracy • Belt loops are crooked, missing tacks xi. Waistband defect category such as: <ul style="list-style-type: none"> • Machine • Materials • Human 					and good housekeeping practised at all times

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Method xii. Discrepancies /defects findings reporting procedure and method: <ul style="list-style-type: none"> • Verbally • Written xiii. Quality Standards references, manuals and procedures					
3. Attach zipper	i. Zipper specifications such as: <ul style="list-style-type: none"> • Types <ul style="list-style-type: none"> ○ Plastic ○ Steel • Model <ul style="list-style-type: none"> ○ Visible ○ Invisible) • Size ii. Types of sewing machine: <ul style="list-style-type: none"> • Lockstitch iii. Types of machine component such as: <ul style="list-style-type: none"> • Needles • Threads stands • Variety size of zip foot: <ul style="list-style-type: none"> ○ Ordinary zip foot, ○ One sided zip foot (right shoe, right hinged, left (solid) ○ Invisible zip foot 	i. Check zipper specifications ii. Identify types of sewing machine iii. Identify types of machine component iv. Check machine specifications and functions setting v. Identify types of sewing tools and equipment vi. Utilise sewing tools and equipment vii. Execute Zipper attachment process viii. Check Zipper appearance ix. Detect type of defective stitching x. Categorise defects, causes and sewing assembly defects details xi. Report discrepancies /defects findings to	<u>Attitude:</u> <ol style="list-style-type: none"> i. Focus in handling job ii. Apply both hands during in a flexible manner process of sewing iii. Apply correct coordination between eyes and left –right hand motion iv. Adhere to Zipper attachment procedure v. Adhere to quality standards requirements vi. Always practice good housekeeping inclusive 	<u>Related Knowledge</u> 4 <u>Related Skill</u> 8	<u>Related Knowledge</u> Lecture Question and Answer <u>Related Skill</u> Demonstration Observation	i. Zipper specifications specified ii. Types of sewing machine and components listed iii. Machine specifications and functions setting described iv. Types of sewing tools and equipment listed and functions described v. Utilization of sewing tools and equipment demonstrated vi. Materials

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Bobbin • Bobbin case • Machine safety devices (needle guard, wheel/ belt cover) <p>iv. Machine specifications and functions setting</p> <p>v. Types of sewing tools and equipment</p> <p>vi. Sewing tools and equipment handling technique</p> <p>vii. Zipper attachment procedure, method and technique</p> <p>viii. Zipper appearance and defects checking method</p> <p>ix. Attached Zipper finished appearance such as:</p> <ul style="list-style-type: none"> • Neatly slashed/trimmed and unsightly threads removed • Wavy zipper • Crooked or uneven zipper • Measurement accuracy • Zipper stop not missing • No defective stitching <ul style="list-style-type: none"> ○ Puckering (ugly wrinkles) 	superior	<p>personal hygiene</p> <p><u>Safety:</u></p> <p>i. Wear PPE during operations</p> <p>ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area</p> <p>iii. Adhere to safety requirements in handling hot/sharp items</p> <p>iv. Follow electrical components safety instructions</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures when handling hazardous materials</p>			<p>preparation demonstrated</p> <p>vii. Zipper attachment process demonstrated</p> <p>viii. Attached Zipper appearance explained according to Zipper specifications and quality standards requirements</p> <p>ix. Attached Zipper defects categorised and details listed according to Quality Standards references, manuals and procedures</p> <p>x. Discrepancies /defects findings reported to superior for further action according to reporting procedure and quality standard</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> o Wobbling stitch (irregular stitching) o Stitch skipping (stitches sometimes skip) x. Zipper defect category xi. Discrepancies /defects findings reporting procedure and method: <ul style="list-style-type: none"> • Verbally • Written xii. Quality Standards references, manuals and procedures					requirements xi. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all times
4. Create button hole	i. Button specifications <ul style="list-style-type: none"> • Types <ul style="list-style-type: none"> o Flat button (Two/four holes) o Springs snaps o Shank button • Button materials <ul style="list-style-type: none"> o Plastic o Steel/metal o Wood o Leather o Glass o Other natural materials • Size • Shape • Colour ii. Button hole	i. Check Button specifications ii. Check Button hole specifications iii. Identify types of sewing machine iv. Identify types of machine component v. Check machine specifications and functions setting vi. Identify types of sewing tools and equipment vii. Utilise sewing tools and equipment xii. Check marking points at machine viii. Execute Button	<u>Attitude:</u> i. Focused in handling job ii. Apply both hands during in a flexible manner during operating button hole machine iii. Apply correct coordination between eyes and left –right hand motion iv. Adhere to button holing procedure	<u>Related Knowledge</u> 2 <u>Related Skill</u> 6	<u>Related Knowledge</u> Lecture Question and Answer Group Discussion <u>Related Skill</u> Demonstration Observation	i. Button and button hole specifications specified ii. Types of machine and components listed iii. Machine specifications and functions setting described iv. Types of sewing tools and equipment listed and functions described

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	specifications <ul style="list-style-type: none"> • Types <ul style="list-style-type: none"> ○ Built in pattern/special attachment ○ Bound ○ In-seam • Button gap • Measurement • Size (based on button diameter plus tolerance) • Colour • Placement iii. Types of machine: <ul style="list-style-type: none"> • Button hole machine iv. Types of machine component such as: <ul style="list-style-type: none"> • Holder • Cutter • Machine safety devices v. Machine specifications and functions setting vi. Types of sewing tools and equipment vii. Sewing tools and equipment handling technique viii. Marking points at machine ix. Button hole operating procedure x. Button hole operation manual	holing process ix. Check Button hole appearance x. Detect type of defective stitching xi. Categorise defects, causes and sewing assembly defects details xii. Report discrepancies /defects findings to superior	v. Adhere to quality standards requirements vi. Always practice good housekeeping inclusive personal hygiene <u>Safety:</u> i. Wear PPE during operations ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area iii. Adhere to safety requirements in handling hot/sharp items iv. Follow electrical components safety instructions			v. Utilization of sewing tools and equipment demonstrated vi. Marking points at button hole machine checking demonstrated vii. Button holing process demonstrated viii. Button hole appearance explained according to button hole specifications and quality standards requirements ix. Button hole defects categorised and details listed according to Quality Standards references, manuals and procedures x. Discrepancies /defects findings reported to

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	kiii. Button hole appearance and defects checking method xi. Button hole finished appearance such as: <ul style="list-style-type: none"> • Neatly slashed and unsightly threads removed • Have uniform 'lips' or edges throughout • Size as button size, thickness and fabric thickness • Out of alignment or improper button spacing • Stitch depth too narrow or wide xiv. Button hole defect category xv. Discrepancies /defects findings reporting procedure and method: <ul style="list-style-type: none"> • Verbally • Written xvi. Quality Standards references, manuals and procedures		<u>Environmental:</u> i. Adhere to environmental procedures when handling hazardous materials			superior for further action according to reporting procedure and quality standard requirements xi. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all times
5. Attach button	i. Button specifications <ul style="list-style-type: none"> • Types <ul style="list-style-type: none"> ○ Flat button 	i. Check button specifications ii. Check button hole	<u>Attitude:</u> i. Focused in handling job	<u>Related Knowledge</u>	<u>Related Knowledge</u>	i. Button specifications specified

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>(Two/four holes)</p> <ul style="list-style-type: none"> ○ Springs snaps ○ Shank button ● Button materials <ul style="list-style-type: none"> ○ Plastic ○ Steel/metal ○ Wood ○ Leather ○ Glass ○ Other natural materials ● Size ● Shape ● Colour <p>ii. Button hole specifications</p> <ul style="list-style-type: none"> ● Button gap ● Measurement ● Dimension) <p>iii. Types of sewing machine:</p> <ul style="list-style-type: none"> ● 2/4 Button machine ● Snap button machine ● Shank button machine <p>iv. Types of machine component such as:</p> <ul style="list-style-type: none"> ● needles ● threads holder ● button clamp ● mould hidden/exposed for snap button <p>v. Machine specifications</p>	<p>specifications</p> <p>iii. Identify types of sewing machine</p> <p>iv. Identify types of machine component</p> <p>v. Check machine specifications and functions setting</p> <p>vi. Identify types of sewing tools and equipment</p> <p>vi. Check button placement and alignment of hole at button</p> <p>vii. Utilise sewing tools and equipment</p> <p>vii. Execute button sewing process</p> <p>viii. Check attached button appearance</p> <p>ix. Detect type of defective stitching</p> <p>x. Categorise defects, causes and sewing assembly defects details</p> <p>xi. Report discrepancies /defects findings to superior</p>	<p>ii. Apply both hands during in a flexible manner during operating buttoning machine</p> <p>iii. Apply correct coordination between eyes and left –right hand motion</p> <p>iv. Adhere to button attachment procedure</p> <p>v. Adhere to quality standards requirements</p> <p>vi. Always practice good housekeeping inclusive personal hygiene</p> <p><u>Safety:</u></p> <p>i. Wear PPE during operations</p> <p>ii. Sharp tools such as cutting tools and hazardous</p>	<p>2</p> <p><u>Related Skill</u></p> <p>6</p>	<p>Lecture</p> <p>Question and Answer Group Discussion</p> <p><u>Related Skill</u></p> <p>Demonstration Observation</p>	<p>ii. Types of machine and components listed</p> <p>iii. Machine specifications and functions setting described</p> <p>iv. Types of sewing tools and equipment listed and functions described</p> <p>v. Utilization of sewing tools and equipment demonstrated</p> <p>viii. Button placement and alignment of hole at button checking demonstrated</p> <p>vi. Button sewing process demonstrated</p> <p>vii. Attached Button appearance explained according to button specifications</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	and functions setting vi. Types of tools and equipment such as: <ul style="list-style-type: none"> Measuring marking device/tape Fabric marking pen Pulling tester/ torque and tension gauge vii. Sewing tools and equipment handling technique viii. Button placement and alignment of hole at button ix. Button sewing operating procedure x. Button sewing machine operation manual xi. Attached Button appearance and defects checking method xii. Button attachment finished appearance such as: <ul style="list-style-type: none"> Neatly slashed/trimmed and unsightly threads removed Securely fastened with neat stitches Size fit button hole size, thickness and fabric thickness 		chemical always kept in safe place/designated area iii. Adhere to safety requirements in handling hot/sharp items iv. Follow electrical components safety instructions <u>Environmental:</u> i. Adhere to environmental procedures when handling hazardous materials			and quality standards requirements viii. Button defects categorised and details listed according to Quality Standards references, manuals and procedures ix. Discrepancies /defects findings reported to superior for further action according to reporting procedure and quality standard requirements x. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all times

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Lack of support materials on fragile fabric • Correct positioned on the centre opening line and in correct relationship to the placket • Equal distance/good proportion between two ends of opening • No rough edges • No dented/cracked/chipped kiii. Button hole defect category xiv. Discrepancies /defects findings reporting procedure and method: <ul style="list-style-type: none"> • Verbally • Written xv. Quality standard references, manuals and procedures					
6. Create eyelet hole	i. Eyelet specifications <ul style="list-style-type: none"> • Types <ul style="list-style-type: none"> ○ Aluminium ○ Brass ○ Velcro ○ Netted ○ Square ○ Triangular 	i. Check Eyelet specifications ii. Check Eyelet hole specifications iii. Identify types of machine iv. Identify types of machine component	<u>Attitude:</u> i. Focused in handling job ii. Apply both hands during in a flexible manner during	<u>Related Knowledge</u> 2	<u>Related Knowledge</u> Lecture Question and Answer Group Discussion	i. Eyelet and Eyelet hole specifications specified ii. Types of machine and components listed

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Eyelet materials <ul style="list-style-type: none"> ○ Steel/metal ○ Plastic • Size • Shape • Colour • Model number • Brand name <p>ii. Eyelet hole specifications</p> <ul style="list-style-type: none"> • Types <ul style="list-style-type: none"> ○ Built in pattern/special attachment ○ Bound ○ In-seam • Eyelet gap measurement • Size • Colour • Placement <p>iii. Types of machine:</p> <ul style="list-style-type: none"> • Eyelet hole machine <p>iv. Types of machine component such as:</p> <ul style="list-style-type: none"> • Holder • Cutter • Machine safety devices <p>v. Sewing tools and equipment handling technique</p> <p>vi. Machine specifications and functions setting</p> <p>vii. Types of tools and</p>	<p>v. Check machine specifications and functions setting</p> <p>vi. Identify types of sewing tools and equipment</p> <p>vii. Utilise sewing tools and equipment</p> <p>xiii. Check marking points at machine</p> <p>viii. Execute Eyelet holing process</p> <p>ix. Check Eyelet hole appearance</p> <p>x. Detect type of defective stitching</p> <p>xi. Categorise defects, causes and sewing assembly defects details</p> <p>xii. Report discrepancies /defects findings to superior</p>	<p>operating eyelet hole machine</p> <p>iii. Apply correct coordination between eyes and left –right hand motion</p> <p>iv. Adhere to eyelet holing procedure</p> <p>v. Adhere to quality standards requirements</p> <p>vi. Always practice good housekeeping inclusive personal hygiene</p> <p><u>Safety:</u></p> <p>i. Wear PPE during operations</p> <p>ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area</p> <p>iii. Adhere to</p>	<p><u>Related Skill</u></p> <p>6</p>	<p><u>Related Skill</u></p> <p>Demonstration Observation</p>	<p>iii. Machine specifications and functions setting described</p> <p>iv. Types of sewing tools and equipment listed and functions described</p> <p>v. Utilization of sewing tools and equipment demonstrated</p> <p>vi. Marking points at Eyelet hole machine checking demonstrated</p> <p>vii. Eyelet holing process demonstrated</p> <p>viii. Eyelet hole appearance explained according to job specifications</p> <p>ix. Eyelet hole defects categorised and details listed according to</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<p>equipment</p> <p>viii. Marking points at machine</p> <p>ix. Eyelet hole operating procedure</p> <p>x. Eyelet hole operation manual</p> <p>vii. Eyelet hole appearance and defects checking method</p> <p>xi. Eyelet hole finished appearance such as:</p> <ul style="list-style-type: none"> • Neatly slashed and unsightly threads removed • Have uniform 'lips' or edges throughout • Size as eyelet size, thickness and fabric thickness • Equal distance from apparel edge and in conjunction with centre line or lap line • Same length and width <p>xii. Eyelet hole defect category</p> <p>xiii. Discrepancies /defects findings reporting procedure and method:</p> <ul style="list-style-type: none"> • Verbally 		<p>safety requirements in handling hot/sharp items</p> <p>iv. Follow electrical components safety instructions</p> <p><u>Environmental:</u></p> <p>i. Adhere to environmental procedures when handling hazardous materials</p>			<p>Quality Standards references, manuals and procedures</p> <p>x. Discrepancies /defects findings reported to superior for further action according to reporting procedure and quality standard requirements</p> <p>xi. Work area , personal hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all times</p>

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> Written iv. Quality standard references, manuals and procedures					
7. Attach eyelet	i. Eyelet specifications <ul style="list-style-type: none"> Eyelet base and ring types <ul style="list-style-type: none"> Aluminium Brass Velcro Netted Square Triangular Eyelet base and ring materials <ul style="list-style-type: none"> Steel/metal Plastic Size Shape Colour Model number Brand name ii. Eyelet hole specifications <ul style="list-style-type: none"> Types <ul style="list-style-type: none"> Built in pattern/special attachment Bound In-seam Eyelet gap measurement Size Colour Placement 	i. Check Eyelet specifications ii. Check Eyelet hole specifications iii. Identify types of machine iv. Identify types of machine component v. Check machine specifications and functions setting vi. Identify types of sewing tools and equipment vii. Utilise sewing tools and equipment viii. Check Eyelet placement and alignment ix. Execute Eyelet holing process x. Check Eyelet hole appearance xi. Detect type of defective stitching xii. Categorise defects, causes and sewing assembly defects details xiii. Report discrepancies /defects findings to superior	<u>Attitude:</u> <ol style="list-style-type: none"> Focused in handling job Apply both hands during in a flexible manner during operating eyelet machine Apply correct coordination between eyes and left –right hand motion Adhere to eyelet holing procedure Adhere to quality standards requirements Always practice good housekeeping inclusive personal hygiene <u>Safety:</u> <ol style="list-style-type: none"> Wear PPE 	<u>Related Knowledge</u> 3 <u>Related Skill</u> 7	<u>Related Knowledge</u> Lecture Question and Answer Group Discussion <u>Related Skill</u> Demonstration Observation	<ol style="list-style-type: none"> Eyelet and Eyelet hole specifications specified Types of machine and components listed Machine specifications and functions setting described Types of sewing tools and equipment listed and functions described Utilization of sewing tools and equipment demonstrated Button placement and alignment eyelet components (washer/ring) checking demonstrated

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	iii. Types of sewing machine: <ul style="list-style-type: none"> • Eyelet machine iv. Types of machine component such as: <ul style="list-style-type: none"> • Holder • Cutter • Machine safety devices v. Sewing tools and equipment handling technique vi. Machine specifications and functions setting vii. Types of tools and equipment such as: <ul style="list-style-type: none"> • Measuring marking device/tape • Fabric marking pen • Pulling tester/ torque and tension gauge viii. Marking points at machine ix. Eyelet attachment operating procedure x. Eyelet base/washer /interlining positioning and setting xi. Eyelet machine operation manual viii. Eyelet appearance and defects checking method xii. Eyelet finished appearance such as: <ul style="list-style-type: none"> • Neatly attached 		during operations ii. Sharp tools such as cutting tools and hazardous chemical always kept in safe place/designated area iii. Adhere to safety requirements in handling hot/sharp items iv. Follow electrical components safety instructions <u>Environmental:</u> i. Adhere to environmental procedures when handling hazardous materials			vii. Eyelet attachment process demonstrated viii. Attached Eyelet appearance explained according to eyelet specifications and quality standards requirements ix. Eyelet defects categorised and details listed according to Quality Standards references, manuals and procedures x. Discrepancies /defects findings reported to superior for further action according to reporting procedure and quality standard requirements xi. Work area , personal

Work Activities	Related Knowledge	Related Skills	Attitude/Safety/Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> • Size as eyelet size, thickness and fabric thickness • Equal distance from apparel edge and in conjunction with centre line or lap line • Same length and width • No rough edges • No dented/cracked xix. Eyelet defect category xx. Discrepancies /defects findings reporting procedure and method: <ul style="list-style-type: none"> • Verbally • Written xix. Quality standard references, manuals and procedures					hygiene, Health, Safety, Environment (HSE) requirements and good housekeeping practised at all times

Employability Skills

Core Abilities	Social Skills
01.01 Identify and gather information 01.02 Document information, procedures or processes 01.04 Analyze information 01.06 Utilize word processor to process information 02.01 Interpret and follow manuals, instructions and SOP's 02.03 Communicate clearly 02.04 Prepare brief reports and checklists using standard forms 03.01 Apply cultural requirements to the workplace 03.02 Demonstrate integrity and apply ethical practices	1. Communication skills 2. Conceptual skills 3. Interpersonal skills 4. Learning skills 5. Leadership skills 6. Multitasking and prioritising 7. Self-discipline

03.03 Accept responsibility for own work and work area 03.05 Demonstrate safety skills 03.06 Respond appropriately to people and situations 04.01 Organize own work activities 04.02 Set and revise own objectives and goals 04.03 Organize and maintain own workplace 04.05 Demonstrate initiative and flexibility	8. Teamwork
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Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. Sample of company documentation procedure (Job order sheet, Job specifications sheet, Standard Operating Procedure, measuring manual)	1:1
2. Quality Standard references, manuals and procedures (Visual Defect Reference Guide, Apparel Defect Classification Manual, Accessories card/buyer special requirements manual, Defects work repair/rework procedure)	1:1
3. Production apparel sample	1:25
4. Sample of fabric	As per required
5. Sample of parts section (waistband, bodice pieces)	As per required
6. Work station/table with adjustable chairs	1:5
7. Sewing machine (2,3,4 single needle lockstitch, overlock, button hole, eyelet hole, buttoning, eyelet buttoning)	1:5
8. Sewing machine component (needles, threads stands, bobbin, bobbin case, Machine safety devices (needle guard, wheel/belt cover))	1:5
9. Sample of machine operating manual	1:25
10. Sewing materials (interlining, threads, twill tape, zippers, button, eyelet)	As per required
11. Dummy model	1:25
12. Sewing tools (tweezers, scissors, measuring tape/marketing device)	1:1
13. Equipment (hot press/iron/ironing table)	1:5
14. Personal Protective Equipment (PPE) (gloves, safety mask, apron, etc)	1:1

REFERENCES

1. Betsy Hosegood eds. (2006), Complete of Sewing, Darling Kindersley Limited London, ISBN 13, 978-1-4053-1295-0
2. Claire Shaeffer, Sewing for the Apparel Industry (2nd Edition), (2012), ISBN 978-0131884434
3. Clifford L Blodget (2013), The Sewing Machine Master Guide: From Basic to Expert, Blodget Publishing, LLC, ISBN 978-0-9900227-2-5
4. Denham, Carolyn (2014), Elementary Sewing Skills from Merchant & Mills, Collins & Brown, ISBN 9781909397415
5. Dorothy Wood (2002) Sewing Skills & Techniques, Lorenz Books, ISBN 878-923160800-0
6. E. Drudi (2002) Figure Drawing For Fashion Design, Pepin Press Publisher, ISBN 978-9054960805
7. Janine Manslow Kathryn Mclelvey, 2002, Fashion Design Process, Innovation & Practice- Blackwell ISBN 0-632-05599-5
8. Maurice J. Johnson, Evelyn C. Moore (2001), Apparel Product Development, Second Edition, Prentice Hall, New Jersey, ISBN 0-13-025439-8
9. Myra Coles (1999), The Sewing Machine Book, Hutchinson and Co. (Publishers) Ltd, ISBN 0-09-173009-0
10. Pati palmer, Gail Brown, (2004), Sewing with Sergers: The Complete Handbook for Overlock Sewing (Serging . . . from Basics to Creative Possibilities series), A Palmer/Pletsch Publication ISBN 978 0935278255
11. Phyllis G. Tortora, Robert S. Merkel (2007), Fairchilds's Dictionary of Textiles, 7th Edition, Fairchild Publications New York, ISBN 1-87005-707-3
12. Wendy Gardiner, Lorna Knight (2011), The Sewing Machine Accessory Bible: Get the Most Out of Your Machine---From Using Basic Feet to Mastering Specialty Feet, Quarto Publishing ISBN 978-0-312-67658-2

SUMMARY OF TRAINING DURATION FOR SEWING OPERATION - LEVEL 2

CU ID	COMPETENCY UNIT TITLE	WORK ACTIVITIES	RELATED KNOWLEDGE	RELATED SKILLS	HOURS	TOTAL
			(A)	(B)	(A+B)	(HOURS)
TA-020-2:2014-C01	SEWING AREA HEALTH, SAFETY AND ENVIRONMENT COMPLIANCE PRACTICES	Prepare housekeeping and preventive maintenance requirements	2	4	6	40
		Check sewing workplace condition	1	3	4	
			6	14	20	
		Carry out work area housekeeping and preventive maintenance	1	4	5	
		Practise health, safety and environment requirements	1	4	5	
		Upkeep work area after operation	11	29	40	
TA-020-2:2014-C02	APPAREL POCKET ATTACHMENT	Check pocket attachment requirements	2	6	8	80
		Prepare pocket attachment requirements	2	6	8	
		Fold pocket cut piece	6	14	20	
		Carry out front bodice piece marking	2	6	8	
		Create apparel pocket opening	6	14	20	
		Sew attached pocket cut piece	5	11	16	
			23	57	80	
TA-020-2:2014-C03	APPAREL PLACKET ATTACHMENT	Check placket attachment requirements	2	6	8	80
		Prepare placket attachment requirements	4	8	12	
		Reinforce placket fabric	5	11	16	
		Attach placket to bodice piece	6	14	20	
		Sew attached placket	8	16	24	
			25	55	80	
TA-020-2:2014-C04	APPAREL SHOULDER, SLEEVES AND SIDE SEAM ATTACHMENT	Prepare shoulder, sleeve and side seam attachment requirements	2	6	8	80
		Carry out shoulder attachment	2	6	8	
		Carry out sleeve and side seam attachment	14	34	48	
		Check shoulder, sleeve and side seam output	5	11	16	
			23	57	80	
TA-020-2:2014-C05	COLLAR AND SLEEVE CUFF CREATION	Prepare collar and sleeve cuff creation requirements	1	3	4	40
		Carry out collar creation	3	7	10	
		Carry out sleeve cuff creation	5	11	16	
		Check collar and sleeve cuff output	3	7	10	
			12	28	40	
TA-020-2:2014-C06	COLLAR, SLEEVE CUFF AND LABEL SEWING OPERATION	Prepare sewing area and material requirements	2	6	8	80
		Carry out collar and label sewing process	12	28	40	
		Carry out sleeve cuff sewing process	7	15	22	
		Check collar and sleeve cuff attachment output	3	7	10	
			24	56	80	
TA-020-2:2014-C07	BOTTOM AND SLEEVE HEM SEWING	Check bottom and sleeve hem sewing requirements	1	3	4	40
		Prepare bottom and sleeve hem sewing requirements	1	3	4	
		Sew bottom and sleeve hem	7	17	24	
		Check bottom and sleeve hem output	2	6	8	
			11	29	40	
TA-020-2:2014-C08	PANTS BODICE PANEL ATTACHMENT	Check pants bodice attachment requirements	2	6	8	80
		Prepare pants bodice attachment requirements	2	6	8	
		Prepare pants fly	2	6	8	
		Sew pants fly	8	16	24	
		Carry out pants bodice piece attachment	5	11	16	
		Carry out pants bottom hemming	5	11	16	
			24	56	80	
TA-020-2:2014-C09	SKIRT BODICE PANEL ATTACHMENT	Check skirt bodice attachment requirements	1	3	4	60
		Prepare skirt bodice attachment requirements	1	3	4	
		Attach skirt front and back bodice piece	2	6	8	
		Carry out skirt creative artwork and decoration	7	17	24	
		Check skirt bodice output	6	14	20	
			17	43	60	
TA-020-2:2014-C10	GARMENT ACCESSORIES SEWING OPERATION	Prepare garment accessories sewing operation requirements	2	6	8	70
		Create waistband	5	11	16	
		Attach zipper	4	8	12	
		Create button hole	2	6	8	
		Attach button	2	6	8	
		Create eyelet hole	2	6	8	
		Attach eyelet	3	7	10	
			20	50	70	
TOTAL HOURS (Core Competencies)			190	460	650	650