

Competency Based Training (CBT) Curriculum Guide for Industrial Sweater Knitting Machine Operator

[Market Oriented Short Term (MOST), Modular Curriculum]

Developed by:

Skills and Employment Programme-Bangladesh (SEP-B)



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
and Cooperation SDC

RMG
Industry
Skills Council

Skills and
Employment
Programme
Bangladesh

Table of Contents

1	INTRODUCTION	1
2	AIMS	1
3	OBJECTIVES.....	1
4	DESCRIPTION	1
5	COURSE STRUCTURE.....	2
6	DURATION	2
7	TARGET GROUP	2
8	GROUP SIZE	2
9	TARGET LOCATION	2
10	MEDIUM OF INSTRUCTION.....	2
11	PATTERN OF ATTENDANCE.....	2
12	FOCUS OF THE PROGRAM	2
13	ENTRY CRITERIA.....	3
14	FOLLOW UP SUGGESTION	3
15	CERTIFICATE REQUIREMENT	3
16	TRAINEES EVALUATION DETAILS	3
17	TRAINERS' QUALIFICATION	3
18	TRAINER–TRAINEES RATIO	3
19	SUGGESTION FOR INSTRUCTION.....	3
20	LIST OF MODULES AND SUB MODULES.....	4
21	MODULE SEQUENCE.....	4
22	DETAIL OF MODULES AND SUB MODULES.....	4
22.1	Module-1: Practice Occupational Health and Safety (OHS) Procedure	6
22.2	Module-2: Apply Fundamental Skills of Knitting Machine Operation.....	11
22.3	Module-3: Make parts of Gent's Sweater	18
22.4	Module-4: Make parts of Lady's Cardigan.....	28
23	LIST OF TOOLS AND EQUIPMENT	39
24	LIST OF TRAINING MATERIALS.....	40
25	PHYSICAL FACILITIES FOR 20 TRAINEES.....	40
26	SUGGESTED REFERENCE BOOKS.....	41
27	CURRICULUM TERMS AND DEFINITION	41
28	CURRICULUMS DEVELOPMENT TEAM.....	42
29	REFERENCES (FOR DEVELOPING CURRICULUMS)	42
30	LINKAGES OF SEP-B CURRICULUM WITH BTEB COMPETENCY STANDARDS.....	43
31	SPECIAL NOTE FOR TRAINING PROVIDERS	43

1 INTRODUCTION

This curriculum guide is designed and developed using Competency Based Training (CBT) approach with the aim of producing skilled human resources for respective occupation. Competency based training approach bases the curriculum on recent analysis of the occupations-not on opinions or books. It focuses on doing-not on theory and assesses the trainees based on industry work standards (Collum, 1994).

This curriculum guide is based on the tasks to be performed as “Industrial Sweater Knitting Machine Operator”.

This curriculum guide is developed in consultation with the trainers, mid-level industry supervisors, and particularly skilled industrial sweater knitting machine operation workforce who are working for sweater knitting industries and training providers of Bangladesh. SEP-B engaged Technical Institute for Technical Instruction (TITI), Nepal to develop the curriculum on Industrial Sweater Knitting Machine Operator.

2 AIMS

The main aim of this training program is to provide medium level skilled workforce required for the ready-made garment sector (RMG) and create better opportunities for employment.

3 OBJECTIVES

At the end of the training course, the trainees will be able to:

- Practice Occupational Health and Safety (OHS) Procedure;
- Apply fundamental skills of knitting machine operation;
- Make parts of gent’s Sweater and
- Make parts of lady’s cardigan.

4 DESCRIPTION

This is a competency based training package for the unemployed and underemployed workforce of Bangladesh. The curriculum is based on the tasks to be performed by the Industrial Sweater Knitting Machine Operator. These tasks have been clustered into various modules. The modules are included in the ‘Course Structure’ section of this curriculum guide. Each task has been further analyzed to obtain Terminal Performance Objective (TPO), steps to perform the task, Enabling Objectives (EOs), duration and tools/equipment/materials required to perform the task.

The training methodology is learner centered where theoretical inputs, demonstration along with plenty of guided and individual practices will be provided to master the skills at the industry standards. Sufficient tools and equipment will also be used during the training to provide hands on skills to the trainees. The training produces competent Industrial Sweater Knitting Machine Operators.

5 COURSE STRUCTURE

Job title: Industrial Sweater Knitting Machine Operator				Time (hrs.)		
S. N.	Modules	Number of Tasks	Nature	Th.	Pr.	Tot.
1.	Practice Occupational Health and Safety (OHS) Procedure.	05	T+P	2.5	3.5	6.0
2.	Apply fundamental skills of knitting machine operation.	05	T+P	4.5	22.5	27.0
3.	Make parts of gent's sweater.	06	T+P	3.0	55.0	58.0
4.	Make parts of lady's cardigan.	08	T+P	4.0	55.0	59.0
All total:		24		14	136	150

6 DURATION

Total duration of the training is **150 hours** excluding soft skills and On-the-Job Training (OJT)/Apprenticeship. The trainees will be sent for employment after completion of the training. The aforementioned duration is only for technical modules.

7 TARGET GROUP

Job seekers, unemployed/underemployed youth, dropped out from the formal schooling, and disadvantaged group of people are the target group of this training course. Women and disadvantaged people are encouraged to receive the training.

8 GROUP SIZE

A maximum group size for the training is 20. The training provider ensures adequate resources and safety.

9 TARGET LOCATION

The training will be implemented in partnership with private training providers situated in the different areas of the country.

10 MEDIUM OF INSTRUCTION

The medium of instruction for this course will be Bangla but the trainees will be oriented on technical terminology in English.

11 PATTERN OF ATTENDANCE

At least 90% attendance is required during the theory and practical classes to appear in the internal and final assessment.

12 FOCUS OF THE PROGRAM

Since this course is a competency-based training, the focus is given on the performance of the trainees. At least 80% of the total training time is allocated for practical and 20% for the theory.

13 ENTRY CRITERIA

The following criteria will be considered for the individual to enter into this training program:

- Education: Grade-V or equivalent
- Age: 18 years or above
- Physically and mentally fit

14 FOLLOW UP SUGGESTION

The training providers who implement CBT program will build rapport with the employers to link graduates with the industries for employment.

Placement: Within one month after the completion of the training program, the graduates will be assisted in finding out the job relevant employment.

The follow-up will be done in two phases to measure the success in job. First follow-up will be done after three months of placement and the next follow up will be done after six months of placement in the job.

15 CERTIFICATE REQUIREMENT

Training service provider will certify the graduates as an Industrial Sweater Knitting Machine Operator after successful completion of the training program through systematic skills testing. Certification can also be linked to the Bangladesh Technical and Education Board (BTEB) at the relevant National Technical and Vocational Qualification Framework (NTVQF) level through recognition of prior learning (RPL).

16 TRAINEES EVALUATION DETAILS

Continuous assessment will be conducted to ensure the performance of the learners. Additionally, final testing will be done to evaluate the participants at the end of the training course. Trainees must secure 100% marks in practical and 60% marks in theoretical examination.

17 TRAINERS' QUALIFICATION

Preference will be given to the trainer's having the following criteria:

- Minimum three years' experience in the respective occupation;
- Working experience as an instructor/trainer and
- Trade course/diploma holder.

18 TRAINER-TRAINEES RATIO

- For theoretical class, trainer and trainees ratio should be 1:20
- For practical class, trainer and trainees ratio should be 1:10

19 SUGGESTION FOR INSTRUCTION

- Follow curriculum guide.
- Allocate at least 80% time of the course for practical purpose.
- Allocate approximately 20% time of the course for theoretical purpose.
- Follow the safety rules.
- Create a friendly learning environment.

- Arrange equipment and materials at the right place on right time.
- Maintain timely presence in the training classrooms/workshop.
- Take attendance of participants regularly.
- Apply learner centered training approaches.
- Encourage the participants to speak and participate.
- Conduct question and answer (Q&A) sessions.
- Prepare lesson plans and learning materials for theoretical and practical classes.

20 LIST OF MODULES AND SUB MODULES

Module 1: Practice Occupational Health and Safety (OHS) Procedure;

Module 2: Apply fundamental skills of knitting machine operation;

Module 3: Make parts of gent's sweater and

Module 4: Make parts of lady's cardigan.

21 MODULE SEQUENCE



22 DETAIL OF MODULES AND SUB MODULES

Module-1:
**Practice Occupational Health and
Safety (OHS) Procedure**

22.1 Module-1: Practice Occupational Health and Safety (OHS) Procedure						
	Description: This module deals with the knowledge and skills required for a Sewing Machine Operator to apply health and safety procedures at the work place.			Hours		
	Module outcomes: After completion of this module, trainees will be able to: <ul style="list-style-type: none"> Follow Safety Sign and Regulations Apply Personal Protective Equipment Control House-Keeping Hazards Apply First Aid on Minor Injuries Control Electrical Hazards. 			Th 2.50	Pr 3.50	Tot. 6.00
1.	Task: Follow Safety Sign and Regulations	Terminal Performance Objective (TPO): Given: Simulated situation What: Follow safety sign and regulations How well: <ul style="list-style-type: none"> All safety signs and regulations must be followed in the workplace 	Th. 0.50	Pr. 0.50	Tot. 1.00	
	Steps: 1. Collect the safety signs, emergency exit plan and list of rules and regulation 2. Display safety sign at eye level 3. Hang the safety sign and visual aids at visible place 4. Explain the application of safety sign and regulation 5. Provide the safety sign and regulation to the trainees 6. Maintain the emergency exit useable 7. Preserve the safety sign and regulation	Enabling objectives: <ul style="list-style-type: none"> Explain the purposes of safety signs State the necessity to follow the safety rules and regulation Explain what are the safety signs in the workplace List the safety sign and regulation Use the all safety items and rules Explain the emergency exit way 				
	Tools/equipment/materials required: Different Safety sign chart, visual aids, danger zone area indicators and rules & regulation charts					

2.	Task: Apply Personal Protective Equipment	Terminal Performance Objective (TPO): Given: Protective equipment What: Apply personal protective equipment How well: <ul style="list-style-type: none"> • The status of the protective materials must be checked while working. • Safety materials such as Apron, Mask, Hair scarf/Cap, Air plug must be worn. 	Th. 0.50	Pr. 1.00	Tot. 1.50
Steps: 1. Collect the personal protective equipment 2. Check the condition of protective equipment 3. Use the protective equipment 4. Maintenance the protective equipment 1. Preserve the protective equipment in organized way at safe place		Enabling objectives: <ul style="list-style-type: none"> • Explain about the uses of protective equipment • Explain how to use the protective equipment • Explain the positive and negative side of uses the protective equipment • List the protective equipment • 			
Tools/equipment/materials required: Workplace Safety Guidelines, Fire Extinguisher, Safety Signs, Tools, Equipment and Workplace Layout. PPE: Apron, Mask, Hair scarf/Cap, Air plug.					
3.	Task: Apply First Aid on Minor Injuries	Terminal Performance Objective (TPO): Given: A simulated victim. What: Apply first aid on minor injuries. How well: <ul style="list-style-type: none"> • Insured person is isolated from the crowd. 	Th. 0.50	Pr. 2.50	Tot. 3.00

		<ul style="list-style-type: none"> Information of accident given to the administration. 			
	Steps: <ol style="list-style-type: none"> Isolate the injured person safely. Collect first aid box. Clean the injured area. Dress the insured portion. Apply necessary medicine as required. Inform to the administration. Restore the first aid box. 	Enabling objectives: <ul style="list-style-type: none"> Define minor injury. Explain how to isolate injured person safely. Describe precaution to be taken while applying first aid on minor injuries. Explain the procedure of first aid treatment. 			
	Tools/equipment/materials required: Simulated Victim and First Aid Box.				
4.	Task: Control House-Keeping Hazards	Terminal Performance Objective (TPO): Given: Simulated situation What: Control house-keeping hazards How well: <ul style="list-style-type: none"> Tools, equipment and safety materials of workplace must be placed in order The periodical maintenance of tools, equipment and safety materials of workplace must be done. 	Th. 0.50	Pr. 0.50	Tot. 1.00
	Steps: <ol style="list-style-type: none"> List the expected hazards exist in workplace Place the tools and equipment in workplace following organized way Follow up the periodic maintenance of tools and equipment 	Enabling objectives: <ul style="list-style-type: none"> Define house-keeping hazards Identify the types of housekeeping hazards Explain the necessity of keeping the house neat and clean (including dining place, washroom/toilets, store and exit path) Understand safety precautions to be taken for housekeeping hazards List the expected house-keeping hazards in the workplace 			

	<p>4. Handle the tools and equipment carefully</p> <p>5. Check the faulty tools and equipment</p> <p>6. Dispose the wastage/ outdated tools & equipment from workplace</p>				
Tools/equipment/materials required: Workplace Safety Guidelines, Fire Extinguisher, Safety Signs, Tools, Equipment and Workplace Layout.					
5.	Task: Control Electrical Hazards	<p>Terminal Performance Objective (TPO):</p> <p>Given: Work place situation (real/simulation)</p> <p>What: Control Electrical Hazards</p> <p>How well:</p> <ul style="list-style-type: none"> • Electrical hazards are identified • Safety precautions must be taken for electrical hazards 	Th. 0.50	Pr. 0.50	Tot. 1.00
	<p>Steps:</p> <ol style="list-style-type: none"> 1. Check the tools and machinery before working 2. Follow up the regular and periodical maintenance of electrical tools, equipment and appliance 3. Locate the place of fire extinguisher 4. Apply fire extinguisher during small electric fire 5. Check the availability of fire extinguishers, sands buckets/ reserver 6. Inform the administration, police and fire station for mass electric fire. 	<p>Enabling objectives:</p> <ul style="list-style-type: none"> • Explain cause of electrical fire hazards • Explain about electrical short circuit • Explain control of electrical fire hazards • List the types of electrical hazards 			
Tools/equipment/materials required: PPE like fire Extinguisher, Sand, vacuum cleaner/hand blower etc.					

Module-2:

Apply Fundamental Skills of Knitting Machine Operation

22.2 Module-2: Apply Fundamental Skills of Knitting Machine Operation

	Description: This module deals with the fundamental of industrial sweater knitting machine operation.	Hours			
	Module outcomes: After completion of this module, trainees will be able to: <ul style="list-style-type: none"> Prepare industrial knitting machine. Carry out plain knitting. Carry out rib knitting. Carry out design knitting. Identify yarn defects and faulty stitches/joints. 	Th. 4.5	Pr. 22.5	Tot. 27.5	
1.	Task: Prepare industrial knitting machine.	Terminal Performance Objective (TPO): Given: Industry workshop setting, User's Manual for Industrial Knitting Machine, Design chart/sample. What: Prepare industrial knitting machine. How well: <ul style="list-style-type: none"> Machine is prepared according to the User's Manual. Gauge (5 Gauge or 7 Gauge) is selected as per the product/sample/design chart. Yarn is adjusted for knitting. 	Th. 2.0	Pr. 10.0	Tot. 12.0
	Steps: <ol style="list-style-type: none"> 1. Collect the required tools and materials. 2. Select the knitting machine as per given Gauge. 3. Select needles according to knitting machine. 4. Open needle scale of knitting machine. 	Enabling objectives: <ul style="list-style-type: none"> Explain the types of industrial knitting machine according to gauge. State parts of the industrial knitting machine. List required tools and materials to prepare industrial knitting machine. Explain the steps to set the needles. Explain the steps to insert the yarn. State the steps for knitting machine preparation. 			

	<ol style="list-style-type: none"> 5. Clean the needles gap of knitting machine using brush. 6. Fill the blank space of the down scale through extra material (fabric or yarn). 7. Insert the needles in needle gaps as per design chart. 8. Insert the needle scale above the needles. 9. Attach the needle clip down the needles. 10. Clean the clip gaps of knitting machine. 11. Insert the clip scale on the top of needle clips. 12. Keep yarn in the yarn stand according to design chart. 13. Pass yarn through the regulator stand. 14. Pass yarn through yarn control spring. 15. Pass yarn through tension spring/hook. 16. Insert yarn in the nose hole/feeder in zero position. 17. Insert the end of the yarn in carriage. 18. Keep the nose stand in the right side of the machine. 19. Perform test-knitting as per design. 20. Remove the work piece from the machine. 21. Clean the workplace and machine. 22. Cover the machine. 23. Restore the tools & materials. 					
<p>Tools/equipment/materials required: Different types of industrial sweater knitting machine, different types of knitting machine tools (Body Guide, Hand Transfer , Sleeve Guide, etc.) and materials (Wool, Candle, Marker Pen, Oil), Needles, Yarn, Design Chart, Sample.</p> <p>PPE: Apron, Mask, Hair scarf/Cap.</p>						
2.	Task: Carry out Plane Knitting.	Terminal Performance Objective (TPO):	Th. 0.5	Pr. 3.5	Tot. 4.0	

		<p>Given: A design chart, sample product.</p> <p>What: Carryout plane knitting.</p> <p>How well:</p> <ul style="list-style-type: none"> • The plane knitting is done according to the sample/design chart. • No fault is seen in the finished product. 			
	<p>Steps:</p> <ol style="list-style-type: none"> 1. Collect design chart and yarn. 2. Check the knitting machine condition. 3. Set the needles according to the design/gauge. 4. Set yarn with the needles according to the design chart. 5. Move carriage from right side to left side. 6. Set the body guide. 7. Set the weight stand. 8. Adjust both side needle control keys. 9. Move carriage from left end to right end and right end to left end to complete one course. 10. Open both side needle control keys. 11. Continue knitting as per design chart until completion. 12. Remove the work piece from the knitting machine. 13. Clean the workplace and machine. 14. Restore tools and material in the safe place. 	<p>Enabling objectives:</p> <ul style="list-style-type: none"> • Define plane knitting. • Interpret design chart of plane knitting. • List tools and materials required to carry out plane knitting. • Explain the steps to carryout plane knitting. 			
<p>Tools/equipment/materials required: Industrial Knitting Machine, Design Chart, Sample, Yarn, Body Guide, Selector, Marker Pen and Weight Stone.</p> <p>PPE: Apron, Mask, Hair scarf/Cap.</p>					

3.	Task: Carry out Rib knitting.	Terminal Performance Objective (TPO): Given: A design chart and a sample product. What: Carry out rib knitting. How well: <ul style="list-style-type: none"> • The rib knitting is according to the sample/design chart. • No fault is seen in the finished product. 	Th. 0.5	Pr. 3.5	Tot. 4.0
	Steps: <ol style="list-style-type: none"> 1. Collect design chart and yarn. 2. Check the knitting machine condition. 3. Set the needles according to the design/gauge. 4. Set yarn with the needles according to the design chart. 5. Move carriage from right side to left side. 6. Set the body guide. 7. Set the weight stand. 8. Adjust both side needle control keys. 9. Move carriage from left end to right end and right end to left end to complete one course. 10. Open both side needle control keys. 11. Continue knitting as per design chart until completion. 12. Remove the rib from the knitting machine. 13. Clean the workplace and machine. 14. Restore tools and material in the safe place. 	Enabling objectives: <ul style="list-style-type: none"> • Define rib knitting. • Interpret design chart of rib knitting. • List tools and materials required to carry out rib knitting. • Explain the steps to carryout rib knitting. 			

	Tools/equipment/materials required: Industrial Knitting Machine, Design Chart, Sample, Yarn, Body Guide, Selector, Marker Pen and Weight Stone. PPE: Apron, Mask, Hair scarf/Cap				
4.	Task: Carry out Design knitting.	Terminal Performance Objective (TPO): Given: A design chart and a sample product What: Carry out design knitting. How well: <ul style="list-style-type: none"> The design knitting is according to the sample/design chart. No fault is seen in the finished product. 	Th. 0.5	Pr. 3.5	Tot. 4.0
	Steps: <ol style="list-style-type: none"> Collect design chart and yarn. Check the knitting machine condition. Set the needles according to the design/gauge. Set yarn with the needles according to the design chart. Move carriage from right side to left side. Change the nose as per design. Set the body guide. Set the weight stand. Adjust both side needle control keys. Move carriage from left end to right end and right end to left end to complete one course. Open both side needle control keys. Continue knitting following step 10 as per design chart until completion. Remove the work piece from the knitting machine. 	Enabling objectives: <ul style="list-style-type: none"> Define design knitting. Interpret design chart of design knitting. List tools and materials required to carry out design knitting. Explain the steps to carry out design knitting. 			

	<p>14. Clean the workplace and machine.</p> <p>15. Restore machine, tools and material in the safe place.</p>				
<p>Tools/equipment/materials required: Industrial Knitting Machine, Design Chart, Sample, Yarn, Body Guide, Selector, Marker Pen, Weight Stone and Nose.</p> <p>PPE: Apron, Mask, Hair scarf/Cap.</p>					
5.	<p>Task: Identify yarn defects and faulty stitches/joints.</p>	<p>Terminal Performance Objective (TPO):</p> <p>Given: Classroom/Industrial setting, measurements, yarn/product specification, Sample quality product.</p> <p>What: Identify yarn defects and faulty stitches/joints.</p> <p>How well:</p> <ul style="list-style-type: none"> Yarn defects and faulty stitches/joints are identified, marked, recorded and reported. 	Th. 1.0	Pr. 2.0	Tot. 3.0
<p>Steps:</p> <ol style="list-style-type: none"> Collect the measurement, tools, sticker, and linked/stitched product. Measure the product as per measurement. Check the stitch/joint quality as per given specification. Check yarn shading/quality as per the specification and sample quality product. Mark the defective area. Record the defects/fault. Report to the quality assurance section. Clean the workplace. Restore the tools & materials. 		<p>Enabling objectives:</p> <ul style="list-style-type: none"> Discriminate quality yarn and defective yarn. Discriminate quality finished product and defective finished product. Explain the procedure to find out defects. Explain how to measure the product. 			
<p>Tools/equipment/materials required: Sticker, Chalk, Scissors, Measurements, Measuring Tape, Specification and Sample Quality Product.</p> <p>PPE: Apron, Mask, Hair scarf/Cap.</p>					

Module-3:
Make Parts of Gent's Sweater

22.3 Module-3: Make parts of Gent's Sweater						
	Description: This module deals with the knowledge and skills required to make parts of Gent's Sweater.			Hours		
	Module outcomes: After completion of this module, trainees will be able to: <ul style="list-style-type: none"> • Make back part of Gent's Sweater. • Make front part of Gent's Sweater. • Make armhole of Gent's Half Sweater. • Make sleeve of Gent's Full Sweater. • Make neck of Gent's Sweater. • Make hood of Gent's Sweater. 			Th. 3.0	Pr. 55.0	Tot. 58.0
1.	Task: Make back part of Gent's Sweater.		Terminal Performance Objective (TPO): Given: A design chart and a sample. What: Make back part of Gent's Sweater. How well: <ul style="list-style-type: none"> • The back part knitting is according to the sample/design chart. • No defect is seen in the finished product. 	Th. 0.5	Pr. 9.5	Tot. 10.0
	Steps: <ol style="list-style-type: none"> 1. Collect design chart and yarn. 2. Check the knitting machine condition. 3. Set the needles according to the design/gauge. 4. Up and down the needles by selector according to design. 5. Set yarn with the needles according to the design chart. 6. Move carriage from right side to left side. 7. Set the body guide. 8. Set the weight stand. 		Enabling objectives: <ul style="list-style-type: none"> • Identify parts of gent's sweater. • Label back part of a gent's sweater. • Interpret design chart of back part of a gent's sweater. • List tools and materials required to make back part of a gent's sweater. • Explain the steps to make back part of a gent's sweater. 			

	<ol style="list-style-type: none"> 9. Adjust both side needle control key. 10. Move carriage from left end to right end and right end to left end to complete one course. 11. Open both side needle control keys. 12. Continue knitting following step 10 as per design chart until completion of rib knitting part. 13. Transfer the work piece from backside to front side. 14. Set grapnel/side hook in two side of back part. 15. Lock backside needle control key. 16. Release front side of tension key. 17. Continue knitting as per design chart. 18. Adjust needles as per shoulder sloping. 19. Continue knitting as per design chart. 20. Locate shoulder point of sweater. 21. Continue knitting as per design chart. 22. Locate finishing hole of sweater. 23. Finish the final course. 24. Remove the back part of the sweater. 25. Trim unwanted yarn of the back part of the sweater. 26. Clean the workplace and machine. 27. Restore tools and material in the safe place. 					
<p>Tools/equipment/materials required: Industrial Knitting Machine, Design Chart, Sample, Yarn, Body Guide, Selector, Marker Pen, and Weight Stone.</p> <p>PPE: Apron, Mask, Hair scarf/Cap.</p>						
2.	<p>Task: Make front part of the Gent's Sweater.</p>		<p>Terminal Performance Objective (TPO):</p> <p>Given: A design chart and a sample finished product</p>	Th. 0.5	Pr. 12.5	Tot. 13.0

		<p>What: Make front part of the Gent's Sweater.</p> <p>How well:</p> <ul style="list-style-type: none"> • The front part knitting is according to the sample/design chart. • No defect is seen in the finished product. 			
	<p>Steps:</p> <ol style="list-style-type: none"> 1. Collect design chart and yarn. 2. Check the knitting machine condition. 3. Set the needles according to the design/gauge. 4. Up and down the needles by selector according to design. 5. Set yarn with the needles according to the design chart. 6. Move carriage from right side to left side. 7. Set the body guide. 8. Set the weight stand. 9. Adjust both side needle control key. 10. Move carriage from left end to right end and right end to left end to complete one course. 11. Open both side needle control keys. 12. Continue knitting following step 10 as per design chart until completion of rib knitting part. 13. Transfer the work piece from backside to front side. 14. Set grapnel/side hook in two side of front part. 15. Lock backside needle control key. 16. Release front side of tension key. 17. Continue knitting as per design chart. 	<p>Enabling objectives:</p> <ul style="list-style-type: none"> • Label front part of a gent's sweater. • Interpret design chart of front part of a gent's sweater. • List tools and materials required to make front part of a gent's sweater. • Explain the steps to make front part of a gent's sweater. 			

	<p>18. Adjust needles as per shoulder sloping.</p> <p>19. Continue knitting as per design chart.</p> <p>20. Mark middle point for neck down.</p> <p>21. Locate side point of sweater.</p> <p>22. Continue knitting as per design chart.</p> <p>23. Locate finishing hole of sweater parts.</p> <p>24. Finish the final course.</p> <p>25. Remove the front part of the sweater.</p> <p>26. Trim unwanted yarn of the front part of the sweater.</p> <p>27. Clean the workplace and machine.</p> <p>28. Restore tools and material in the safe place.</p>					
<p>Tools/equipment/materials required: Industrial Knitting Machine, Design Chart, Sample, Yarn, Body Guide, Selector, Marker Pen and Weight Stone.</p> <p>PPE: Apron, Mask, Hair scarf/Cap.</p>						
<p>3</p>	<p>Task: Make arm hole of Gent’s Half Sweater</p>		<p>Terminal Performance Objective (TPO):</p> <p>Given: Design Chart, a sample product and back.</p> <p>What: Make armhole of Gent’s Half Sweater.</p> <p>How well:</p> <ul style="list-style-type: none"> The armhole is made as per the given design chart and sample product. 	<p>Th. 0.5</p>	<p>Pr. 5.5</p>	<p>Tot. 6.0</p>
<p>Steps:</p> <ol style="list-style-type: none"> Collect design chart, yarn and required tools. Set needles and yarn in knitting machine Set yarn bobbin in wooden stand of knitting machine. Insert yarn in the needles. 		<p>Enabling objectives:</p> <ul style="list-style-type: none"> Identify parts of a gent’s half sweater. Define armhole of a gent’s half sweater. Explain design chart of a gent’s half sweater. Explain the steps to make the armhole. 				

	<ol style="list-style-type: none"> 5. Up and down the needles by selector. 6. Set the needle as per design chart. 7. Move carriage to adjust needles from right side to left side. 8. Move carriage from left side to right side to set guide. 9. Set weight stand with body guide. 10. Lock needle control keys. 11. Complete one course of knitting as per design. 12. Continue courses as per design chart. 13. Open needle control key. 14. Finish the rib knitting of back part of arm hole. 15. Transfer rib from backside to front side in the knitting machine. 16. Lock backside of needle control keys. 17. Release front side of tension key. 18. Continue courses as per design chart. 19. Hand stitch/hand finishing both side of the half sweater parts. 20. Put down both side needle of knitting machine. 21. Continue courses as per design chart. 22. Identify shoulder sloping down. 23. Continue courses as per design chart. 24. Identify shoulder side point of half sweater. 25. Continue courses as per design chart. 26. Locate the finishing hole of half sweater parts. 27. Continue finishing course. 28. Collect the part of gent's half sweater. 29. Restore machine, tools and material in the safe place. 	
--	--	--

	Tools/equipment/materials required: Industrial Knitting Machine, Yarn, Body Guide, Selector, Marker Pen, Weight Stone, Side Hook (Kata), Fashion Kata, Narrowing Comb. PPE: Apron, Mask, Hair scarf/Cap.				
4	Task: Make sleeve of Gent's Full Sweater	Terminal Performance Objective (TPO): Given: Industrial setting, sleeve guide and design chart. What: Make sleeve of Gent's Full Sweater. How well: <ul style="list-style-type: none"> • The sleeve of a gent's full sweater is made as per design chart. • No stitching gap is seen. • No extra thread is found. • No defects or faults seen in knitting. 	Th. 0.5	Pr. 8.5	Tot. 9.0
	Steps: <ol style="list-style-type: none"> 1. Collect sleeve guide, yarn and required tools. 2. Set needles and yarn in knitting machine 3. Set yarn bobbin in wooden stand. 4. Insert yarn in the needles. 5. Up and down the needles by selector. 6. Set the needle as per design chart. 7. Move carriage to adjust needles from right side to left side. 8. Move carriage from left side to right side to set guide. 9. Set weight stand with body guide. 10. Lock needle control keys. 11. Complete one course of knitting as per design. 12. Continue course as per design chart. 13. Open needle control key. 14. Set gear as per design chart. 	Enabling objectives: <ul style="list-style-type: none"> • Identify sleeve of a gent's full sweater. • Explain the application of sleeve guide of gent's full sweater. • Interpret design chart of sleeve knitting. • List required tools and materials to make the sleeve of gent's full sweater. • Explain the procedure to make gent's full sweater. 			

	<p>15. Finish the rib knitting of sleeve part.</p> <p>16. Continue courses as per design chart of sleeve.</p> <p>17. Put down both side needle of knitting machine .</p> <p>18. Continue knitting course of sleeve</p> <p>19. Identify armhole sloping down.</p> <p>20. Make center point in the sleeve.</p> <p>21. Continue final courses.</p> <p>22. Collect the part of sleeve.</p> <p>23. Restore machine, tools and material in the safe place.</p>					
<p>Tools/equipment/materials required: Industrial Knitting Machine, Yarn, Sleeve Guide, Selector, Marker Pen, Weight Stone, Side Hook (Kata), Fashion Kata, Hand Transfer.</p> <p>PPE: Apron, Mask, Hair scarf/Cap.</p>						
5	<p>Task: Make neck of Gent’s Sweater</p>		<p>Terminal Performance Objective (TPO):</p> <p>Given: Industrial setting, design chart and specification</p> <p>What: Make neck of Gent’s Sweater.</p> <p>How well:</p> <ul style="list-style-type: none"> • The neck of gent’s sweater is made as per design chart and sample product. • No defects and faults seen in the neck part. • Maintained yarn tension of yarn as per specification sheet. 	Th. 0.5	Pr. 7.5	Tot. 8.0
<p>Steps:</p> <ol style="list-style-type: none"> 1. Collect design chart and yarn. 2. Check the knitting machine condition. 3. Set yarn with needles in knitting machine. 4. Set the yarn as per design. 		<p>Enabling objectives:</p> <ul style="list-style-type: none"> • Identify neck part of a gent’s full sweater. • Explain measurement of design chart. • Explain the procedure to make the neck of gent’s full sweater. 				

	<ol style="list-style-type: none"> 5. Start first course for setting guide and weight stand. 6. Adjust both side needle control keys. 7. Move carriage from right side to left side for once following round course. 8. Lock both side needle control keys. 9. Continue courses as per design chart. 10. Loose right side front tension key 11. Take the carriage to the left side. 12. Adjust right side front tension key. 13. Finish neck part by extra (4-5) courses as per design. 14. Remove the neck part from machine. 15. Restore machine, tools and material in the safe place. 					
<p>Tools/equipment/materials required: Industrial Wool Knitting Machine, Neck Guide, Body Guide, Yarn, Selector, Marker Pen, Weight Stone, Side Hook (Kata).</p> <p>PPE: Apron, Mask, Hair scarf/Cap.</p>						
6	<p>Task: Make hood of Gent's Sweater.</p>		<p>Terminal Performance Objective (TPO):</p> <p>Given: Industrial Setting and design chart/ specification</p> <p>What: Make hood of Gent's Sweater.</p> <p>How well:</p> <ul style="list-style-type: none"> • The hood of gent's sweater is made as per design chart. • No defects in the hood/joints. • Yarn tension is maintained as per specification sheet. 	Th. 0.5	Pr. 11.5	Tot. 12.0

<p>Steps:</p> <ol style="list-style-type: none"> 1. Collect required tools, design chart and yarn. 2. Set needles and yarn in the knitting machine. 3. Move the carriage from right side to left side. 4. Set the body guide in the hood. 5. Set the neck guide in the hood. 6. Set weight stone in the neck guide and body guide. 7. Lock both side needle control keys. 8. Start the round shaped courses in the hood once. 9. Change gear as per design chart. 10. Continue courses as per design chart. 11. Transfer yarn from backside to front side. 12. Continue courses as per design chart. 13. Make shape of hood by sloping down on left side. 14. Make shape of hood sloping down on right side. 15. Continue courses as per design chart. 16. Make finishing courses as per design (4-5 courses). 17. Collect the finished product. 18. Restore tools and material in the safe place. 	<p>Enabling objectives:</p> <ul style="list-style-type: none"> • Discriminate hood with other parts of a gent's full sweater. • Interpret design chart. • List tools and materials to make hood of gent's full sweater. • Explain the procedure to make the hood of gent's full sweater.
<p>Tools/equipment/materials required: Industrial Wool Knitting Machine, Neck Guide, Body Guide, Yarn, Selector, Marker Pen, Weight Stone, Side Hook (Kata). PPE: Apron, Mask, Hair scarf/Cap.</p>	

Module-4:
Make Parts of Lady's Cardigan

22.4 Module-4: Make parts of Lady's Cardigan

	Description: This modules deals with the knowledge and skills required to make parts of Lady's Cardigan	Hours			
	Module outcomes: After completion of this module, trainees will be able to: <ul style="list-style-type: none"> Make back part of Lady's Cardigan. Make front part of Lady's Cardigan. Make sleeve of Lady's Cardigan. Make neck of Lady's Cardigan. Make pocket of Lady's Cardigan. Make piping of Lady's Cardigan. Make placket of Lady's Cardigan. Make hood of Lady's Cardigan. 	Th. 4.0	Pr. 55.0	Tot. 59.0	
1.	Task: Make back part of Lady's Cardigan	Terminal Performance Objective (TPO): Given: In an industrial setting with design chart/ specification. What: Make back part of Lady's Cardigan. How well: <ul style="list-style-type: none"> The back part is made as per design chart/specification. No damage/fault seen in the finished product. 	Th. 0.5	Pr. 7.5	Tot. 8.0
	Steps: <ol style="list-style-type: none"> 1. Collect design chart, yarn and required tools. 2. Set yarn Bobbin in wooden stand. 3. Put the needle up by selector. 4. Move the carriage in right end. 5. Set nose with carriage brush. 6. Move the carriage in left end of knitting machine. 7. Set body guide with yarn in the knitting machine. 8. Set weight stand in the body guide of sweater. 	Enabling objectives: <ul style="list-style-type: none"> Identify parts of a lady's cardigan. Label parts of back part of a lady's Cardigan. Interpret design chart to make of back part of a lady's Cardigan. State the function of tools and materials used to make parts of a lady's Cardigan. Explain the procedure of lady's cardigan making. 			

	<ol style="list-style-type: none"> 9. Lock needle control key in the knitting machine. 10. Start the round shaped course. 11. Open needle control key in the knitting machine. 12. Set gear as per design chart of sweater. 13. Continue knitting as per design chart of sweater to finish the rib of sweater. 14. Transfer rib from backside to front side in the knitting machine. 15. Set grapnel/side kata in two side of sweater parts. 16. Lock backside of needle control key. 17. Loose front side of tension key. 18. Continue courses as per design chart of sweater. 19. Put down both side needles. 20. Continue courses as per design chart. 21. Locate shoulder sloping down of the cardigan. 22. Continue courses as per design chart. 23. Locate shoulder point of sweater. 24. Continue courses as per design chart. 25. Locate the finishing hole of cardigan parts. 26. Continue finishing course of cardigan parts by extra (4-5) courses as per design. 27. Collect the back part of cardigan from the machine. 28. Restore tools and material in the safe place. 				
<p>Tools/equipment/materials required: Industrial Wool Knitting Machine, Neck Guide, Body Guide, Yarn, Selector, Marker Pen, Weight Stone, and Side Hook.</p> <p>PPE: Apron, Mask, Hair scarf/Cap.</p>					
2.	<p>Task: Make front part of Lady's Cardigan</p>	<p>Terminal Performance Objective (TPO):</p>	Th. 0.5	Pr. 11.5	Tot .

		<p>Given: In an industrial setting, a design chart with specification.</p> <p>What: Make front part of Lady's Cardigan</p> <p>How well:</p> <ul style="list-style-type: none"> • The front part is made as per design/specification. • No damage is seen in the joints/stitches of a finished product. 			12. 0
	<p>Steps:</p> <ol style="list-style-type: none"> 1. Collect design chart and yarn. 2. Set the needles according to the design/gauge. 3. Up and down the needles by selector according to design. 4. Set yarn with the needles according to the design chart. 5. Move carriage from right side to left side. 6. Set the body guide. 7. Set the weight stand. 8. Adjust both side needle control key. 9. Move carriage from left end to right end and right end to left end to complete one course. 10. Open both side needle control keys. 11. Continue knitting following step 10 as per design chart until completion of rib knitting part. 12. Transfer rib from backside to front side in the knitting machine. 13. Set grapnel/side kata in two side of sweater parts. 14. Lock backside of needle control key in the knitting machine. 15. Loose front side of tension key in knitting machine. 	<p>Enabling objectives:</p> <ul style="list-style-type: none"> • Discriminate front part with other parts of a lady's cardigan. • Explain design chart to make front part of a lady's cardigan. • Describe why different color yarn is used while finishing the product. • State the steps to make the front part of a lady's cardigan. 			

	<p>16. Down one needle as per design. 17. Continue knitting/courses. 18. Put both side needle down. 19. Continue knitting/courses as per design chart. 20. Increase needles in both side of back part of the woman's cardigan. 21. Continue courses as per design chart. 22. Locate shoulder sloping down. 23. Continue courses as per design chart. 24. Put both side needle down of neck as per design in front part. 25. Locate shoulder point of sweater. 26. Continue course as per design chart of sweater. 27. Locate the finishing hole of sweater parts. 28. Continue finishing course by different color yarn. 29. Collect the part of cardigan. 30. Restore tools and material in the safe place.</p>				
<p>Tools/equipment/materials required: Industrial Wool Knitting Machine, Neck Guide, Body Guide, Yarn, Selector, Marker Pen, Weight Stone, Side Hook, One Hook, and Fashion Hook. PPE: Apron, Mask, Hair scarf/Cap.</p>					
3.	<p>Task: Make sleeve of Lady's Cardigan</p>	<p>Terminal Performance Objective (TPO):</p> <p>Given: In an industrial setting, a design chart with specification.</p> <p>What: Make sleeve of woman's cardigan.</p> <p>How well:</p> <ul style="list-style-type: none"> • The sleeve is made as per design/specification. • No damage is seen in the joints/stitches of a finished product. 	Th. 0.5	Pr. 7.5	Tot 8.0

	<p>Steps:</p> <ol style="list-style-type: none"> 1. Collect sleeve guide, yarn and required tools. 2. Set needles and yarn in knitting machine 3. Set yarn bobbin in wooden stand of knitting machine. 4. Insert yarn in the needles. 5. Up and down the needles by selector. 6. Set the needle as per design chart. 7. Move carriage to adjust needles from right side to left side. 8. Move carriage from left side to right side to set guide. 9. Set weight stand with body guide. 10. Lock needle control keys. 11. Complete one course of knitting as per design. 12. Continue course as per design chart. 13. Open needle control key. 14. Set gear as per design chart. 15. Finish the rib knitting of sleeve part. 16. Continue courses as per design chart of sleeve. 17. Put down both side needle of knitting machine in sleeve part. 18. Continue course of sleeve parts 19. Identify armhole sloping down. 20. Continue course of sleeve parts. 21. Make center point in the sleeve. 22. Continue final finishing courses. 23. Collect the part of sleeve. 24. Clean workplace. 25. Restore tools and material in the safe place. 	<p>Enabling objectives:</p> <ul style="list-style-type: none"> • Identify sleeve part of a lady's cardigan. • Explain the design chart. • State the steps to make sleeve of lady's cardigan. 			
<p>Tools/equipment/materials required: Industrial Wool Knitting Machine, Neck Guide, Body Guide, Yarn, Selector, Marker Pen, Weight Stone, Side Hook, One Hook, and Fashion Hook. PPE: Apron, Mask, Hair scarf/Cap.</p>					
4.	<p>Task: Make neck of Lady's Cardigan</p>	<p>Terminal Performance Objective (TPO):</p>	Th. 0.5	Pr. 7.5	Tot. 8.0

		<p>Given: Industrial setting, Design chart with specification, sample finished product.</p> <p>What: Make neck of Lady's Cardigan.</p> <p>How well:</p> <ul style="list-style-type: none"> • Neck part is made according to the given design chart. • No yarn defect is seen inneck. • Finished neck is mached with the sample finished product. 			
	<p>Steps:</p> <ol style="list-style-type: none"> 1. Collect design chart and yarn. 2. Set yarn with needles in knitting machine. 3. Start first course for setting guide and weight stand. 4. Adjust both side needle control keys. 5. Move carriage from right side to left side for once following round course. 6. Lock both side needle control keys. 7. Change gear as per design. 8. Continue courses as per design chart. 9. Loose right side front tension key 10. Take the carriage to the left side. 11. Adjust right side front tension key. 12. Finish neck part by extra (4-5) courses as per design. 13. Measure the finished neck with the sample 14. Remove the neck part from machine. 15. Restore tools and material in the safe place. 	<p>Enabling objectives:</p> <ul style="list-style-type: none"> • Discriminate neck part from other parts of a lady's cardigan. • Interpret design chart. • Describe the specification. 			

	Tools/equipment/materials required: Industrial Wool Knitting Machine, Neck Guide, Body Guide, Yarn, Selector, Marker Pen, Weight Stone and Side Hook. PPE: Apron, Mask, Hair scarf/Cap.				
5.	Task: Make pocket of Lady's Cardigan	Terminal Objective (TPO): Given industrial setting, Design chart and a sample product. What: Make pocket of Lady's Cardigan How well: <ul style="list-style-type: none"> • Pocket of lady's cardigan is made according to the given design chart. • No defect in yarn/joints/stitches. • Matches with the sample finished product. 	Th. 0.5	Pr. 3.5	Tot. 4.0
	Steps: <ol style="list-style-type: none"> 1. Collect design chart, yarn and required tools. 2. Set needles and yarn. 3. Put the needle up by selector. 4. Move the carriage in right end. 5. Set nose with carriage brush. 6. Move the carriage in left end of knitting machine. 7. Set body guide with yarn in the knitting machine. 8. Set weight stand in the body guide of sweater. 9. Lock needle control key in the knitting machine. 10. Set gear as per design chart. 11. Continue knitting as per design chart. 12. Transfer thread from backside needle to front side needle. 13. Continue courses as per design chart. 	Enabling objectives: <ul style="list-style-type: none"> • Identify the pocket of a lady's cardigan. • Interpret design chart of the pocket of a lady's cardigan. • State the procedure to make the pocket of a lady's cardigan. 			

	<p>14. Continue finishing course of cardigan parts by extra (4-5) courses as per design.</p> <p>15. Collect the pocket part.</p> <p>16. Restore tools and material in the safe place.</p>				
<p>Tools/equipment/materials required: Industrial Wool Knitting Machine, Yarn, Marker Pen, Weight Stone and Side Hook.</p> <p>PPE: Apron, Mask, Hair scarf/Cap.</p>					
6.	<p>Task: Make piping of Lady's Cardigan</p>	<p>Terminal Performance Objective (TPO):</p> <p>Given: Industrial setting, Design chart and a sample product.</p> <p>What: Make piping of lady's cardigan.</p> <p>How well:</p> <ul style="list-style-type: none"> • Pocket of lady's cardigan is made according to the given design chart. • No defect is seen in yarn/joints/stitches. • Finished product is matched with the sample product. 	Th. 0.5	Pr. 2.5	Tot. 3.0
<p>Steps</p> <ol style="list-style-type: none"> 1. Collect design chart and yarn. 2. Check the knitting machine condition. 3. Set the needles according to the design/gauge. 4. Set yarn with the needles according to the design chart. 5. Move carriage from right side to left side. 6. Set the body guide. 7. Set the weight stand. 8. Adjust both side needle control key. 9. Move carriage from left end to right end and right end to left end to complete one course. 		<p>Enabling objectives:</p> <ul style="list-style-type: none"> • Identify piping part of a lady's cardigan. • State the steps to make piping part of a lady's cardigan. 			

	<p>10. Open both side needle control keys.</p> <p>11. Continue knitting following step 9 as per design chart until completion.</p> <p>12. Remove the work piece from the knitting machine.</p> <p>13. Clean the workplace and machine.</p> <p>14. Restore tools and material in the safe place.</p>				
<p>Tools/equipment/materials required: Industrial Wool Knitting Machine, Yarn, Selector, Marker Pen, Weight Stone, and Side Hook.</p> <p>PPE: Apron, Mask, Hair scarf/Cap.</p>					
7.	<p>Task: Make placket of Lady's Cardigan</p>	<p>Terminal Performance Objective (TPO):</p> <p>Given: Industrial setting, Design chart and a sample product.</p> <p>What: Make placket of lady's cardigan.</p> <p>How well:</p> <ul style="list-style-type: none"> • Placket of lady's cardigan is made according to the given design chart. • No defect is seen in yarn/joints/stitches. • Matches with the sample finished product. 	Th. 0.5	Pr. 3.5	Tot .4.0
<p>Steps :</p> <ol style="list-style-type: none"> 1. Collect design chart and yarn. 2. Set the needles according to the design. 3. Set yarn with the needles according to the design chart. 4. Move carriage from right side to left side. 5. Set the body guide. 6. Set the weight stand. 7. Adjust both side needle control key. 		<p>Enabling objectives:</p> <ul style="list-style-type: none"> • Discriminate placket from other parts of a lady's Cardigan. • State the steps to make placket. 			

	<p>8. Move carriage from left end to right end and right end to left end to complete one course.</p> <p>9. Open both side needle control keys.</p> <p>10. Continue knitting by following step 9 as per design chart until completion.</p> <p>11. Remove the work piece from the knitting machine.</p> <p>12. Clean the workplace and machine.</p> <p>13. Restore tools and material in the safe place.</p>				
<p>Tools/equipment/materials required: Industrial Knitting Machine, Yarn, Selector, Marker Pen, Weight Stone, and Side Hook.</p> <p>PPE: Apron, Mask, Hair scarf/Cap</p>					
8.	<p>Task: Make hood of Lady's Cardigan.</p>	<p>Terminal Performance Objective (TPO):</p> <p>Given: Industrial Setting and design chart/ specification</p> <p>What: Make hood of lady's cardigan.</p> <p>How well:</p> <ul style="list-style-type: none"> • The hood is made as per design chart. • No defects in the hood/joints. • Yarn tension is maintained as per specification sheet. 	Th. 0.5	Pr. 11.5	Tot. 12.0

<p>Steps:</p> <ol style="list-style-type: none"> 1. Collect required tools, design chart and yarn. 2. Set needles and yarn in the knitting machine. 3. Move the carriage from right side to left side. 4. Set the body guide in the hood. 5. Set the neck guide in the hood. 6. Set weight stone in the neck guide and body guide. 7. Lock both side needle control keys. 8. Start the round shaped courses in the hood once. 9. Change gear as per design chart. 10. Continue courses as per design chart. 11. Transfer yarn from backside to front side. 12. Continue courses as per design chart. 13. Make shape of hood by sloping down on left side. 14. Make shape of hood sloping down on right side. 15. Continue courses as per design chart. 16. Make finishing courses as per design (4-5 courses). 17. Collect the finished product. 18. Restore tools and material in the safe place. 	<p>Enabling objectives:</p> <ul style="list-style-type: none"> • Discriminate hood with other parts of a gent's full sweater. • Interpret design chart. • List tools and materials to make hood of gent's full sweater. • Explain the procedure to make the hood of gent's full sweater.
<p>Tools/equipment/materials required: Industrial Wool Knitting Machine, Neck Guide, Body Guide, Yarn, Selector, Marker Pen, Weight Stone, Side Hook (Kata). PPE: Apron, Mask, Hair scarf/Cap.</p>	

23 LIST OF TOOLS AND EQUIPMENT

S. N.	Name of the items	Specification	Quantity	Unit
1.	Knitting machine	7G or 5G	10+10	Pcs.
2.	Flat screw driver	6"- 12"	20	Pcs.
3.	Star screw driver	6"- 12"	20	Pcs.
4.	Scissors	9"-12"	20	Pcs.
5.	Thread trimmer	Standard size	20	Pcs.
6.	Tweezers	Standard size	20	Pcs.
7.	Allen key set	Standard size	5	Set
8.	Steel scale	12"	1	Dozen
9.	Nose pliers	8"	6	Pcs.
10.	Cutting pliers	8"	6	Pcs.
11.	Adjustable wrench	8"	6	Pcs.
12.	Neon tester	Standard size	6	Pcs.
13.	Ball pin hammer	Standard size	6	Pcs.
14.	Regulator Supporter (Wood)		20	Pcs.
15.	Winding Machine		5	Pcs.
16.	Hand Brush		10	Pcs.
17.	Body guide		20	Set
18.	Sleeve guide		20	Set
19.	Neck guide		20	Set
20.	Selector		40	Pcs.
21.	Transfer		20	Pcs.
22.	Auto Transfer		20	Pcs.
23.	Kata (Hook) 1-9		20	Set.
24.	Down plate		20	Pcs.
25.	Holder Stick		20	Pcs.
26.	Side Kata (Hook)		40	Pcs.
27.	Weight Stone		60	Pcs.
28.	Fashion kata (Hook)		20	Set

24 LIST OF TRAINING MATERIALS

S. N.	Name of the items	Specification	Quantity	Unit
1.	Wool/Cotton yarn	2/32 count/2/3 ply	20	kg
2.	Design and drawing paper	23" x 33" News paper	1 (500 pcs.)	Ream
3.	Chalk/Color Pencil	Candle made	4	Box
4.	Machine oil		2	Liter
5.	Emery paper		5	rft.
6.	Oil pot		20	Pcs.
7.	Glue (Adhesive)		2	Pcs.
8.	Whiteboard Marker		24	Pcs.
9.	Safety Gears (Apron, Mask, Hair scarf/Cap, Air plug)		24	Set
10.	Fire extinguisher	5 Kg each	2	Pcs.
11.	Pencil		24	Pcs.
12.	Erasure		24	Pcs.
13.	Sharpener		24	Pcs.
14.	Permanent Marker pen		24	Pcs.
15.	Exercise written book		24	Pcs.

25 PHYSICAL FACILITIES FOR 20 TRAINEES

S. N.	Name of the items	Specification	Quantity	Unit
1.	Workshop with Theory Corner	25 ft. x 30 ft.	1	Pcs.
2.	Display board	4 ft. x 8 ft.	1	Pcs.
3.	White Board	4 ft. x 8 ft.	1	Pcs.

26 SUGGESTED REFERENCE BOOKS

- Sweater Knitting Machine Operation Manual, Ashania Mission, 2008, Dhaka.

27 CURRICULUM TERMS AND DEFINITION

Competency	Competency means a cluster of related abilities, commitments, knowledge, and skills that enable a trainees or person to act effectively in a job.
Curriculum Guide	A curriculum guide is a detail resource for trainees/instructors to conduct training programs effectively. The guide intends to add the trainers/instructors in developing lesson plan, handouts/learning materials, training manuals, and evaluation criteria etc., which are basic elements in the teaching learning process.
Curriculum	A plan for providing sets of learning opportunities to achieve broad goal and related specific objectives for the people by a single school center.
DACUM/RJA	<u>D</u> eveloping <u>A</u> Curriculum/ <u>R</u> apid <u>J</u> ob <u>A</u> nalysis (DACUM/RJA) is a technique used to identify the competencies relevant to a particular occupation.
Duty	Duty is an arbitrary clustering of related tasks in to broad functional area or general area of responsibility of trainees.
Enabling Objective	A statement expressing a knowledge, skills or attitudes those will enable the trainee to accomplish a terminal performance objective.
Instructional Guide	Instructional guide is a well-planned and structured document for the instructor to deliver effective instruction so that trainees can attain learning objectives as per training standards.
Module	A module is defined as a specific learning material. Modules are essentially self-contained. Self-instructional packages, with learning paced by each learner according to his/her individual ability and needs.
Occupational Analysis	Occupational analysis is a process used to identify the duties and tasks those are important to workers in any given occupation. A number of alternative and acceptable approaches to occupational analysis are available.
Program guide	A program guide is a comprehensive resource for trainers/instructors, planners, and top-level management for planning and implementation of any training programs.
Program Objectives	The objectives are set in a broad way to target to achieve mastery learning of the complete occupation.
Skill	The ability to perform on occupational task with the degree of proficiency required for a given occupation.
Step	The smallest discrete or observable aspect of a task.
Task Analysis	Task analysis is the process of identifying and writing down the specific skills, knowledge and attitudes that distinguish someone who

	performs a task competency from someone who cannot perform the task at all.
Task	A unit of work complete in itself that forms a logical part of an occupation. It can be broken down into discrete steps.

28 CURRICULUMS DEVELOPMENT TEAM

SL#	Name	Designation	Organization	Contact Number
1.	Md. Dudu Miah	Instructor/Trainer, Knitting Machine Operator	Dhaka Ahsania Mission	01710893031
2.	Ahmed Nabi	Sr. Instructor, UCEP-Sewing and Knitting	UCEP	01716306302
3.	Md. Anwar Hossain	Floor in charge/Supervisor, Knitting Machine Operator	BGMEA	01712421207
4.	Md. Arman Shaek	Skilled Worker, Knitting Machine Operator	BGMEA	01911672305
5.	Md. Anisuzzaman	Training Coordinator	SEP-B	01912-153859
6.	Anoj Bhattarai	Consultant	TITI	
7.	Akim Shrestha	Consultant	TITI	

Overall Supervision: Md. Anisuzzaman

Workshop Facilitator(s): Md. Anisuzzaman, Anoj Bhattarai and Akim Shrestha

Record and Documentation: Anoj Bhattarai and Akim Shrestha

29 REFERENCES (FOR DEVELOPING CURRICULUMS)

- Skills for Unemployment and Underemployed Labour (SkillFUL) Project, Swisscontact (2012, July). Curriculum Guide for Sweater Knitting Operator. Dhaka, Bangladesh.
- Skills and Employment Programme-Bangladesh (SEP-B) (2014, November). Rapid Job Analysis of Industrial Sweater Knitting Machine Operator. Dhaka Bangladesh.
- Contents of UCEP curriculum

30 LINKAGES OF SEP-B CURRICULUM WITH BTEB COMPETENCY STANDARDS

S. N.	SEP-B Training Module	BTEB Competency Standards
1.	Apply occupational safety and health procedures at the work place.	GN100412A Practice Occupational Health and Safety (OHS)
2.	Discuss fundamental of knitting machine operation.	NA
3.	Make parts of gent's sweater.	NA
4.	Make parts of lady's cardigan.	NA
5.	Apply occupational safety and health procedures at the work place.	NA

31 SPECIAL NOTE FOR TRAINING PROVIDERS

Since the technology is moving fast, if there will have any new demand/skills beyond the curriculum guide, please send the comments and suggestions to the address given in the curriculum. The project believes that the development has no boundaries.

Skills and Employment Programme-Bangladesh (SEP-B)

Road No # 10, House # 5, Level-3

Baridhara, Dhaka

Phone: 01782-388923