Upgradation of ITIs into Centers of Excellence-Broad guidelines for implementation of the Broad Based Basic Training in "SECTOR APPAREL".

These Centres will be providing multi skill training to meet the skill requirement of particular sector of industry with their active involvement in all aspects of training. The training will be provided in three parts as given below:

✓ Training in Basic skill areas for a period of one year.

✓ Training in Advanced modules for next six months.

The testing & certification for the Basic skill training during first year & also for advanced training during next six months will be conducted by NCVT.

✓ Training in specialized modules mainly in the industry (The course curricula, duration etc will be designed in consultations with the IMC/local industry. The trade testing & certification for this component will be done jointly by the State Government & Industry. Said   certificate will be recognized by NCVT .

As per the recommendations of the EFC, Training in the shop floor should constitute 25-40% of the curriculum. The training programme will have multi-entry and multi-exit provisions:

✓ trainee can opt to go to the labour market after completing broad based basic training of one year duration as well as after completing 1½ year of training.

✓ trainee can join training after some time for advanced/specialised training in another module of same sector .

✓ ITI pass out trainee of the particular trade(s) from the conventional system can seek admission for advanced/specialised training in relevant sector .

In first year, curricula in the Area/Sector of **'APPAREL'**, uniform rotation for eight weeks each in the six Basic Modules as mentioned below will be taken up except for module **APBT 2 & 3** where module **APBT -3** is required to be taken after module **APBT -2** and these two modules are required to be taken together . The trades from where existing infrastructure i.e. equipment/ instructor etc could be utilized for the training in **"APPAREL Sector"** is given below:

Basic modules	Name of the Module	Trade(s) from where existing infrastructure facility / instructor could be utilized
APBT-01	**Fundamental of Garment Technology**	Cutting & Sewing / Dress Making
APBT- 02	**Garment Sewing (Part-1) Basic Sewing**	Cutting & Sewing / Dress Making
APBT- 03	**Garment Sewing (Part-2) Advanced Sewing**	Cutting & Sewing / Dress Making
APBT- 04	**Pattern Making**	Cutting & Sewing / Dress Making
APBT- 05	**Computerized Pattern Making**	-
APBT- 06	**Quality Control Finishing & Packing**	Cutting & Sewing / Dress Making

For each of above module , Trade Practical will be 28 hours /week and Trade theory for 4 hours /week. Apart from above Generic modules as mentioned below will be taught throughout the year.

G-01-ENTERPRENEURSHIP AND COMMUNICATION SKILLS…..

2hrs/week

In addition, 4 hours/week have been kept for Library studies & Physical Training

<u>**Vocational Instructors**</u>:

NAME OF THE MODULE	No. of Vocational Instructors (VIs)
ITBT – 01 to 06	Six VIs one each for 6 module of relevant trades
G-01	One contract/part time / guest faculty for Generic module, ENTERPRENEURSHIP AND COMMUNICATION SKILLS –G-01

The eligibility and other criteria will be as follows:

Eligibility : 10th pass under 10+2 system .

Batch size : 96 trainees 16 in each module (20% supernumeraries be allowed to take care of drop outs as already exist under CTS)

Admission:

For basic training, admissions are to be made in August / Feb each year.

Fee Structure:

Fee Structure may be decided by States Govt. in consultation with IMCs . It may be desirable to prescribe a uniform tuition fee for a sector in all Centres of Excellence of a state .

Space:

Since workshop/theory class rooms are envisaged to be accommodated in the existing building of the ITI, therefore, following norms are prescribed only for new infrastructure is to be created .

(1) Workshop space of 70 sqm for each basic module
(2) Three Theory classrooms of 30 sqm each

The Theory classrooms should have latest infrastructure including AV aids as per details given below:

1.	Suitable Chairs/ tables*	-As required
2.	OHP/Epidiascope	- 1 No.
3.	Laptop computer/PC (latest) & LCD projector**	-1 No.
4.	Magnetic white board	-1 No.
5.	White board	-1 No.
6.	Flip chart	-1 No.
7.	Storage Almirah	- As required

(* Optimum utilization of space/flexibility may be kept in view)
(**Keeping in view the constraints of funds under the scheme, it is proposed to procure only one set of Laptop computer/PC / LCD projector for CoE. However, States may procure additional Laptop computer/PC/LCD projector from their funds) While selecting furniture, it should be kept in mind that these are meant for Centres of Excellence. Criteria like maximum flexibility/utilization of space should be kept in view.

Office Equipment:

For each CoE one Scanner, one Photocopy Machine and one PC/printer along with suitable accessories/furniture and internet connection (if not

already available in the institute) is proposed to be provided for each CoE, in addition to the equipment prescribed in the syllabus.

Addition/alteration/Construction:

 For Civil Works, tentative amount of Rs 40.00 lakhs have been proposed per CoE. It is envisaged to have separate block/ wing for the Centre of Excellence in the ITI campus. In case space is available in the existing building of an ITI for taking up new areas as per requirement of the cluster of Industry, the existing space will be renovated as per the need. Alternately, separate block will be built up in the same campus keeping in view the space requirements of the Electrical Sector .

While planning for addition /alteration/Construction of workshop and Class rooms, following may be kept in view:

- ✓ concept of a Centre of Excellence

- ✓ the fact that the requirement of funds for construction /addition /alteration for advanced training will be higher than that of basic training

Publicity

Wide publicity & advertisement be given for better response . The role of the local as well as the concerned Industry is very vital for the success of this program.

States may consider providing additional equipment/ other facilities like separate Library/upgradation of existing Library, Conference Hall/ Committee Room etc. from their own funds.

SECTOR / AREA : APPAREL

BROAD BASED BASIC TRAINING
(First Year)

Module No	Name of Module	Duration of Module in Week
1	Fundamentals of Garment Technology	8
2	Garment Sewing (Part - 1) Basic Sewing	8
3	Garment Sewing (Part - 2) Advance Sewing	8
4	Pattern Making	8
5	Computerized Pattern Making	8
6	Quality Control, Finishing & Packing	8

SECTOR / AREA : APPAREL

BROAD BASED BASIC TRAINING
(First Year)

MODULE – I

FUNDAMENTALS OF GARMENT TECHNOLOGY
(Duration - 8 Weeks)

BROAD BASED BASIC TRAINING
(First Year)
MODULE – I : Fundamentals of Garment Technology
(Duration - 8 Weeks)

i) Course Contents

Week No.	Theory	Practical
1	Introduction to the course Knowledge of Sewing Hand tools. Knowledge of varieties of threads available in the market. Construction, size, count, meterage, ticket no, twist, durability & suitability to different fabrics.	Familiarization with different sewing tools & safety precautions in their use. Introduction to sewing machine. Smooth running of sewing machine, speed control, practice on paper for running the machine in straight lines, making corner, curve lines etc. Practice of top stitching – ½" 1/8" 1/16" & 1/32"
2	Introduction to industrial sewing machine - Main parts, their functions, use, oiling & Cleaning of machine, Minor adjustment, machine attachments, feed systems, needles.	Cleaning & Oiling of machine. Correct posture during stitching. Threading of machine, filling & fixing of bobbin & bobbin case, practice on cloth for stitching and use of machine attachments.
3& 4	Knowledge of the following Industrial sewing machines Double Needle Machine, Double needle machine –feed of the arm overlock machine, Bar tack machine, Button hole machine, button sewing machines, Blind hemming machine Zig zag machine. their function, main parts & use	Working on special machines in respect of speed control, threading, minor mechanical adjustment & use of their special function.
5	Introduction to different cutting room machines – straight knife cloth cutting machine, round knife cloth cutting machine, Die cutter etc. Introduction to fusing technology & fusing machines –its necessity & function. Introduction to spreading cum computerized cutting machines	Practice of working on cutting machine Practice of working on fusing machine
6	Knowledge of different seams and seam finishes. Technical Terms used in Garment Technology	.Practice of making different seams.
7&8.	Introduction to hand stitches -Temporary stitches - Permanent stitches - Classification, construction & their use	Threading of needle, starting & ending of stitches. Practice of making different stitches. Making of small useful products from the above exercises.

Note : After completion of the course trainee can work as Sewing Machine Operator in any Garment Export House.

Tools, Machinery Equipment etc. for a batch of 16 Trainee

Tools, Machinery Equipment :

1. All hand tools can be shared with the related practical labs.
2. *Practice on sewing machine will be in sewing lab of Module 2 & 3*

II) Tools, Machinery Equipment etc. for a batch of 16 Trainee

Sr. No	Description	Quantity
	Trainee Toolkit	
1	Scissor- 8"	17 nos.
2	Snips	17 nos.
3	Thimble	17 nos.
4	Seam Ripper	17 nos.
5	Screw Driver Set	17 Nos.
	General Machinery	
1	Single needle lock stitch Flatbed High-speed machine - Computerized with UBT	16 Nos.
2	Single needle lock stitch with needle feed system - computerized with UBT	2 no
3	2- Needle lock stitch split needle bar	1 No.
4	2- Needle Lock Stitch Fix Bar Machine with Belt Folder	1 No.
5	Feed -off-the arm (light to mid) machine cylinder bed	1 No.
6	3-Thread over lock	1 No.
7	Elastic attaching machine - 4 Needle with Folder	1 No.
8	Five Thread flat lock machine (2 needle)	1 No.
9	Bar taking machine (Computerized)	1 No.
10	Single needle zigzag m/c (Computerized)	1 No.
11	Button hole machine (Computerized)	1 No.
12	Button stitch machine (Computerized)	1 No.
13	Blind Hemming Machine	1 No.
14	1- Needle Two Thread overlock machine	2 Nos.
15	Belt Attaching Machine with Belt Folder	1 No.
16	Mini Boiler - 01 No. with Vacuum Pressing Table - 2 Nos. with Shirt & Trousers Buck Electrical Steam Press Automatic - 2 Nos.	1 Set

Attachments for machinery		
1	Single Needle shoulder top stitch attachments	1 No.
2	Single needle sleeve attachment	1 No.
3	Cuff setter	1 No.
4	Short tail sewing hammer	1 No.
5	T-Guide	1 No.
6	Magnetic Guide	1 No.
7	Hammer Foot	1 No.
8	Lapped seam folder (2 needle machine)	1 No.
9	Bottom hemming folder	1 No.
10	Loop folder foot	1 No.
11	Zipper Foot	1 No.
12	Front placket folder for 2 needle machine	1 No.

General Shop Outfit		
1	Steel cupboard	1 No.
2	Table and Chair (for C.I.)	1 No.
3	Cutting table : 4X8' X3' (With sun mica)	1 No.
4	Stool (Wooden Square)	16 Nos.

III) Other Requirements

For Theory Room

Sr. No.	Details	Remarks
1	Chair with armrest and writing pad	16 Nos.
2	White Board	Minimum 1 No.
3	Audio System of good sound quality OR Public Address System within the Class Room range	Minimum 1 No.
4	Overhead Projector with high quality inbuilt thermostat Condenser & Twin Lamp	Minimum 1 No.
5	Teaching Transparency OR Other Teaching Aid.	As per Requirement
6	Multimedia Projector (with all attachment)	Minimum 1 No.

For Practical Room

Sr. No.	Details	Remarks
1	Table (4 x 2.5 ft)	4 Nos.
2	White Board	1 No.
3	Air Conditioner Split Type 1.5 TON	1 No.

- Neat and Clean premises duly painted.
- Cold drinking water facility should be provided.
- Classrooms and Lab facility available as per the requirement of the course.
- Proper Lighting and ventilation provided.
- Proper storage facility available to store the components, meters, etc.
- "A" class electrical line laying done with proper Earthing to avoid hazards.

SECTOR / AREA : APPAREL

BROAD BASED BASIC TRAINING
(First Year)

MODULE – II

GARMENT SEWING (PART – I) BASIC SEWING

(Duration - 8 Weeks)

BROAD BASED BASIC TRAINING
(First Year)

MODULE – II : Garment Sewing (Part – I) Basic Sewing
(Duration - 8 Weeks)

i) Course Contents

Week No.	Theory	Practical
1.	Introduction to the course Knowledge of Sewing Hand tools. Knowledge of varieties of threads available in the market. Construction, size, count, meterage, ticket no, twist, durability & suitability to different fabrics.	Familiarization with different sewing tools & safety precautions in their use. Introduction to sewing machine. Smooth running of sewing machine, speed control, practice on paper for running the machine in straight lines, making corner, curve lines etc.
2.	Introduction to industrial sewing machine - Main parts, their functions, use, oiling & Cleaning of machine, Minor adjustment, machine attachments, feed systems, needles etc.	Practice of top stitching – ½" 1/8" 1/16" & 1/32" Cleaning & Oiling of machine. Correct posture during stitching. Threading of machine, filling & fixing of bobbin & bobbin case, practice on cloth for stitching and use of machine attachments.
3.	Knowledge of shaping techniques - Different type of Tucks - Different type of Darts - Different type of Pleats	Practice on making - Different type of Tucks - Different type of Darts - Different type of Pleats
4.	Measurement - Methods of taking measurements - Precautions in taking measurements - Study of size charts - Terms used in drafting. **Identification and use of Drafting** Pattern making tools. Knowledge of different type of - Plackets - Collars	Practice on cloth for making - Different type of Plackets - Different type of collars
5.	Knowledge of Different type of - Cuff - Pockets	Practice on cloth - Making of different type of Cuffs - Making of different type of Pockets - Precautions during stitching
6.	Knowledge of Trimming materials - Tapes & Stiffenings. - Bindings & Ribbons - Clasps & Buckles - Elastics - Laces & Braided Cords - Beads and Flowers - Lace Color, Pad and Fringes etc Fastenings - Different type of zips - Buttons and Button holes - Hooks and eyes - Snap fasteners and velcro strips	Fixing of Different type of trimmings such as - Ribbons, Laces, Braids etc. - Fixing of buttons - Making of different type of button holes - Fixing of Hooks and eyes - Fixing of snap fasteners
7& 8	Drafting of the given garments and converting the same in to full scale pattern	Stitching of the given garments salwar, Churidar payazama, Frock, Blouse, Katori Blouse, Kurta etc.

Note : After completion of the course trainee can work as Machine Operator/Asst. Pattern Master in any Garment Export House.

II) Tools, Machinery Equipment etc. for a batch of 16 Trainee

Sr. No	Description	Quantity
	Trainee Toolkit	
1	Scissor- 8"	17 nos.
2	Measuring tape	17 nos.
3	Hip Curve, Leg Shapper, Arm Hole French Curve, Pattern Master, Tailors Square	17 set
4	Hand cutter for Thread	17 nos.
5	Screw Driver Set	17 Nos.
	General Machinery	
1	Single needle lock stitch Flatbad Highspeed machine - Computerised with UBT	16 Nos.
2	Single needle lock stitch with needle feed system - computerised with UBT	2 nos
3	2- Needle lock stitch split needle bar	1 No.
4	2- Needle Lock Stitch Fix Bar Machine with Belt Folder	1 No.
5	Feed -off-the arm (light to mid) machine cylinder bed	1 No.
6	3-Thread over lock	1 No.
7	Elastic attaching machine - 4 Needle with Folder	1 No.
8	Five Thread flat lock machine (2 needle)	1 No.
9	Bar taking machine (Computerized)	1 No.
10	Single needle zigzag m/c (Computerized)	1 No.
11	Button hole machine (Computerized)	1 No.
12	Button stitch machine (Computerized)	1 No.
13	Collar turning machine with different die set	1 No.
14	Cuff turn machine with different die set	1 No.
15	1- Needle Two Thread overlock machine	2 Nos.
16	Belt Attaching Machine with Belt Folder	1 No.
17	4 Needle Machine for shirt placket with placket folder	1 No.
18	Mini Boiler - 01 No. with Vacuum Pressing Table - 2 Nos. with Shirt & Trousers Buck Electrical Steam Press Automatic - 2 Nos.	1 Set
	Attachments for machinery	
1	Single Needle shoulder top stitch attachments	1 No.
2	Single needle sleeve attachment	1 No.
3	Cuff setter	1 No.
4	Short tail sewing hammer	1 No.
5	T-Guide	1 No.
6	Magnetic Guide	1 No.

7	Hammer Foot	1 No.
8	Lapped seam folder (2 needle machine)	1 No.
9	Bottom hemming folder	1 No.
10	Loop folder foot	1 No.
11	Zipper Foot	1 No.
12	Front placket folder for 2 needle machine	1 No.
General Shop Outfit		
1	Steel cupboard	1 No.
2	Table and Chair (for C.I.)	1 No.
3	Cutting table : 4X8' X3' (With sun mica)	1 No.
4	Stool (Wooden Square)	16 Nos.

III) Other Requirements

For Theory Room

Sr. No.	Details	Remarks
1	Chair with armrest and writing pad	16 Nos.
2	White Board	Minimum 1 No.
3	Audio System of good sound quality OR Public Address System within the Class Room range	Minimum 1 No.
4	Overhead Projector with high quality inbuilt thermostat Condenser & Twin Lamp	Minimum 1 No.
5	Teaching Transparency OR Other Teaching Aid.	As per Requirement
6	Multimedia Projector (with all attachment)	Minimum 1 No.

For Practical Room

Sr. No.	Details	Remarks
1	Table (4 x 2.5 ft)	4 Nos.
2	White Board	1 No.
3	Air Conditioner Split Type 1.5 TON	1 No.

- Neat and Clean premises duly painted.

- Cold drinking water facility should be provided.

- Classrooms and Lab facility available as per the requirement of the course.

- Proper Lighting and ventilation provided.

- Proper storage facility available to store the components, meters, etc.

- "A" class electrical line laying done with proper Earthing to avoid hazards.

SECTOR / AREA : APPAREL

BROAD BASED BASIC TRAINING

(First Year)

MODULE - III
GARMENT SEWING (PART – II) ADVANCE SEWING

(Duration - 8 Weeks)

BROAD BASED BASIC TRAINING
(First Year)

MODULE – III : Garment Sewing (Part – II) Advance Sewing
(Duration - 8 Weeks)

i)   **Course Contents**

Week No	Theory	Practical
1 To 2	Knowledge of preparation of Shirts Drafting of Shirt. (Use of different types of machine with attachment & folders) Method of preparation of shirts Front placket Pocket prepare Pocket stitch on front Shoulder and back joint with label Front end shoulders joint Sleeve placket Join Sleeve with armhole Collar and cuff Cuff and Collar joint Button and button hole mark Button hole on front placket Button sewing on front placket	Construction of Shirts (Use different types of machine with attachment & folders) Cutting of Shirt Front Placket Pocket prepare Pocket stitch on front Shoulder and back joint with label Front end shoulders joint Prepare sleeve Placket Join sleeve with armhole Prepare collar and cuff Cuff and Collar joint Prepare button hole on front placket Button sewing on front placket
3 To 4	Knowledge of preparation of T-Shirts Drafting of T-Shirt. (Use of different types of machine with attachment & folders) Method of preparation of T-shirts	Construction of T-Shirts (Use different types of machine with attachment & folders) Cutting of T-Shirt Stitching of Shirt
5 To 6	Knowledge of preparation of Trousers - Denim (Use different types of machine with attachment & folders) Drafting of Trouser Method of preparation of Trouser Front pocket Back darts Back pocket Label stitching Zip attachment Front and back joint Belt joint Loops joint Front and back joining Bottom hemming Button and button hole marks Button sewing	Construction of Trousers - Denim (Use different types of machine with attachment & folders) Cutting of Trousers Prepare Front pocket Back darts Prepare Back pocket Label stitching Zip attachment Front and back joint Belt joint Loops joint Front back leg joint Bottom hemming practice Button and button hole marks Button sewing Prepare button hole

Week No	Theory	Practical
7	Fittings and alterations - Principles of good fit - Basic fitting defects in upper body garments & their rectification - Basic fitting defects in lower body garments and their rectification.	Rectification of defects appears in shirts Rectification of defects appears in Trousers.
8	Introduction to Regional Traditional Dress	Construction of Regional Traditional Dress

II) Tools, Machinery Equipment etc. for a batch of 16 Trainee

Sr. No	Description	Quantity
	Trainee Toolkit	
1	Scissor- 8"	17 nos.
2	Measuring tape	17 nos.
3	Hip Curve, Leg Shapper, Arm Hole French Curve, Pattern Master, Tailors Square	17 set
4	Hand cutter for Thread	17 nos.
5	Screw Driver Set	17 Nos.
	General Machinery	
1	Single needle lock stitch Flatbad Highspeed machine - Computerised with UBT	16 Nos.
2	Single needle lock stitch with needle feed system - computerised with UBT	2 nos
3	2- Needle lock stitch split needle bar	1 No.
4	2- Needle Lock Stitch Fix Bar Machine with Belt Folder	1 No.
5	Feed -off-the arm (light to mid) machine sylinder bed	1 No.
6	3-Thread over lock	1 No.
7	Elastic attaching machine - 4 Needle with Folder	1 No.
8	Five Thread flat lock machine (2 needle)	1 No.
9	Bar taking machine (Computerised)	1 No.
10	Single needle zigzag m/c (Computerised)	1 No.
11	Button hole machine (Computerised)	1 No.
12	Button stitch machine (Computerised)	1 No.
13	Collar turning machine with different die set	1 No.
14	Cuff turn machine with different die set	1 No.
15	1- Needle Two Thread overlock machine	2 Nos.
16	Belt Attaching Machine with Belt Folder	1 No.
17	4 Needle Machine for shirt placket with placket folder	1 No.
18	Mini Boiler - 01 No. with Vaccum Pressing Table - 2 Nos. with Shirt & Trousers Buck Electrical Steam Press Automatic - 2 Nos.	1 Set
	Attachments for machinery	
1	Single Needle shoulder top stitch attachments	1 No.
2	Single needle sleeve attachment	1 No.
3	Cuff setter	1 No.
4	Short tail sewing hammer	1 No.

5	T-Guide	1 No.
6	Magnetic Guide	1 No.
7	Hammer Foot	1 No.
8	Lapped seam folder (2 needle machine)	1 No.
9	Bottom heamming folder	1 No.
10	Loop folder foot	1 No.
11	Zipper Foot	1 No.
12	Front placket folder for 2 needle machine	1 No.
General Shop Outfit		
1	Steel cupboard	1 No.
2	Table and Chair (for C.I.)	1 No.
3	Cutting table : 4X8' X3' (With sunmika)	1 No.
4	Stool (Wooden Square)	16 Nos.

III) Other Requirements
For Theory Room

Sr. No.	Details	Remarks
1	Chair with armrest and writing pad	16 Nos.
2	White Board	Minimum 1 No.
3	Audio System of good sound quality OR Public Address System within the Class Room range	Minimum 1 No.
4	Overhead Projector with high quality inbuilt thermostat Condenser & Twin Lamp	Minimum 1 No.
5	Teaching Transparency OR Other Teaching Aid.	As per Requirement
6	Multimedia Projector (with all attachment)	Minimum 1 No.

For Practical Room

Sr. No.	Details	Remarks
1	Table (4 x 2.5 ft)	4 Nos.
2	White Board	1 No.
3	Air Conditioner Split Type 1.5 TON	1 No.

- Neat and Clean premises duly painted.
- Cold drinking water facility should be provided.
- Classrooms and Lab facility available as per the requirement of the course.
- Proper Lighting and ventilation provided.
- Proper storage facility available to store the components, meters, etc.
- "A" class electrical line laying done with proper Earthing to avoid hazards.

SECTOR / AREA : APPAREL

BROAD BASED BASIC TRAINING

(First Year)

**MODULE - IV
PATTERN MAKING**

(Duration - 8 Weeks)

BROAD BASED BASIC TRAINING
(First Year)

MODULE – IV : PATTERN MAKING
(Duration - 8 Weeks)

i)   Course Contents

Week No.	Theory	Practical
1.	Introduction to the course Importance and type of patterns. Information of tools about pattern creations. Advantages of pattern and their use. Creating patterns using different size and sample. Taking care in different print, checks and strips.	Checking of material abut pattern creation. Use of tools and equipment in the workshop with safety precautions. Checking of different patterns drawing and samples. Creating pattern using different sizes and sample
2.	Terms and Terminology, Industrial norms, Pattern paper, pattern making terms, grain lines, notches, seam allowances, darts marking.	Handling of tools and equipment for pattern making.
3.	Measuring techniques and its importance, garment measuring system and anatomy of body. Study of size charts.	Measuring practice. Practice of taking individual measurement. Garment measurement system. Measurement noting abnormal body.
4 to 6	Basic body patterns, drafting method pattern, preparation, perfection and shaping process, draping method, preparation for body's drape, front back drape, transferring draped muslin to patterns.	Making of basic body patterns using standard measurement on paper. Completing notches, punches, seams, allowances Completing drafts and patterns on marking.
7.	Introduction to Design Analysis. Elements and Principles of Design. Pattern manipulation. (Dart, collar, sleeve etc.)	Making bodice pattern. Practice of drapping and drafting method.
8.	Pattern Grading Methods of Grading Grading the patterns. Grading the slopers Grading of production patterns.	Practice of Pattern grading Grading the pattern. Grading the slopers. Grading of production patterns.

Note : After completion of the course trainee can work as Asst. Pattern Master in any Garment Export House.

II) Tools, Machinery Equipment etc. for a batch of 16 Trainee

Sr. No	Description	Quantity
	Trainee Toolkit	
1	Measuring tools – wooden scale, arm sticks(all types), Measure tap, ruler (wooden), Ruler (steel) (24")	17 nos.
2	Cutting Seizers 6"	17 nos.
3	Pick glass 1" size	17 nos.
4	Inspection glass with border (light)	17 nos.
5	Different type of dummies – children, ladies and gents	As per Requirement
6	Different type of cloth hanger	As per Requirement
7	Scissor 10'	17 nos.
8	Magnifier glass	17 nos.
9	Paper Sticker (Different Colors)	100 nos.
10	Color Marking Chalk for Cloth (Different Colors)	50 nos.
1	Scissors 8"	17 nos.
2.	Tailors Square Plastic	17 nos.
3.	Leg Shaper Plastic	17 nos.
4	Marking Wheel	17 nos.
5.	Measuring tape	17 nos.
6.	Pattern Master (Shaper Set)	17 nos.
7.	Hip Curve plastic	17 nos.
8.	Arm hole French curve big plastic	17 nos.
9.	Steel ruler 100 cm	17 nos.
10	Stools with adjustable height steel frame and padded seat(one for each machine)	16 nos.
11	Sharpener (Table Model)	02 nos.
12	Gum tape Dispenser	02 nos.
13	Waste paper basket – tin\plastic	08 nos.
14	Cutting table with cork sheet top -8' x 6'	16 nos.
15.	Pattern Punch ¼"	02 nos.
16.	Pattern notcher	02 nos.
17.	Pattern Hanging Hooks	75 nos.
18.	Pattern Hanging Stand	02 nos.
19.	Gent's dress form with stand size 32,34,36,38	01 no.
20.	Ladies dress form with stand. Size 8,10,12,14	02 nos.

21.	Calculator Desk Type	01 no.
22.	Steel Lockers over all sizes 195 cm x 90 cm x 48 cm having a compartment grills with provision for separate locks	03 nos.
23.	Locks for above	16 nos.
24.	Wall Clock	01 no.
25.	White Board (fixed on wall) 120 x 120 cm.	01 no.
26.	O.H.P. with trolley and screen	01 no.
General Machinery		
1	Modern Lab to prepare Sample according to the pattern (Pattern Sample)	01 no.

For Theory Room

Sr. No.	Details	Remarks
1	Chair with armrest and writing pad	16 Nos.
2	White Board	Minimum 1 No.
3	Audio System of good sound quality OR Public Address System within the Class Room range	Minimum 1 No.
4	Overhead Projector with high quality inbuilt thermostat Condenser & Twin Lamp	Minimum 1 No.
5	Teaching Transparency OR Other Teaching Aid.	As per Requirement
6	Multimedia Projector (with all attachment)	Minimum 1 No.

SECTOR / AREA : APPAREL

BROAD BASED BASIC TRAINING

(First Year)

MODULE - V
COMPUTERIZED PATTERN MAKING

(Duration - 8 Weeks)

BROAD BASED BASIC TRAINING
(First Year)

MODULE – IV : Computerized Pattern Making
(Duration - 8 Weeks)

i) Course Contents

Week No.	Theory	Practical
1	Introduction to computer, What is Computer ? Construction and working of Digital computer, Concepts of input and output devices and their ports, types of ports used in PC, identification only note and tips and techniques, Various types of Input, Output, devices and printers: DMP, Inkjet, Color Laser Printer, & Plotter, Software, types of software, concept of Operating System, Single User, Multi user Operating Systems, DOS, Windows, Application Software & package Software, Concept of Driver Software, Installing and Uninstalling Drivers. Starting and shutting down PC. Identify drives and capacity. Creation Folders on Desktop and drive using windows & DOS . Commands Virus and anti virus programs types and symptoms.	Demo of working of Computer, demo of input and output devise, their features, handling and handling precautions, Identify external ports and connectors: identify types of connectors and interconnections, practice removing and interconnecting. Floppy drive and storage media. CD Rom drive, media and usage, Mouse, Scanners, Printers. Features of Windows as an operating system Start and Shutdown Creating and operating of icons Opening closing and sizing the windows. Using elementary job commands like creating, saving, modifying, renaming, finding and deleting a file. Creating and operating on a folder. Changing setting like, date, time color (back ground, Screen saver etc) Using short cuts Using on line help
2&3	Various Method of Editing of Documents. Concept of Editing, Formatting, saving, reusing, printing, exporting, & Transfer of documents Concept of text processing, overview of Note Pad, Word Pad, MSWORD, bars and controls, description of options in the file edits and view menu, using short cuts. Concept and importance of presentation, presentation techniques Features of Ms Power Point. Planning presentation, Creating Text and Picture	MS WORD File management: Opening, creating and saving a document, locating files, copying contents in some different file (s), protecting files, Giving password protection for a file Page Set Up: Setting margins, tab setting, ruler, indenting Editing a document: Entering text, Cut, Copy, Paste Formatting a document: Using different fonts, changing font size and color, changing the appearance

Week No.	Theory	Practical

	presentation. Creating Text and Picture Animations. Adding Sound to Slides, Adding Movies to slide.
	Rehearsing Timing and Recording Presentation Narration.
		through bold/italic/underlined, highlighting a text, changing case, using subscript and superscript, using different underline methods, aligning of text in a document, justification of document, Inserting bullets and numbering.
		    Formatting paragraph, inserting page breaks and column breaks
		    Use of headers, footers: Inserting footnote, and note, use of comments
		    Inserting date, time, special symbols, importing graphic images, drawing tools.
		    Table and Borders:
		Creating a table, formatting cells, use of different border styles, shading in tables, merging of cell, partition of cells, inserting and deleting a row in a table.
		Print preview, zoom, page set up, printing options
		Using Find, Replace options
		Using Tools like:
		Spell checker, help, mail merge, thesaurus word content and statistics, printing envelops and labels
		Using shapes and drawing Toolbar,
		
		Inserting of word art and picture, Word Art or other objects in the document and their formatting as per requirement
		POWER POINT
		Starting Ms Power Point and Viewing A Presentation. Creating Presentation Slides With Text and Images.

Week No.	Theory	Practical
4	Concept of worksheet Features and limitations of Ms Excel and Parts of an Excel sheet. Entering and editing Data in Cells of a Excel sheet. Features of the file and edit menu. Using short Cuts. Description of feature of inserts and format menu and uses with examples. Concept of BAR CHART, PIE CHART Description of features of tools menu and concept of data table and features of data menu. Examples using multiple worksheet and books. Concept of Internet, Term used in web Technology, creation of e-mail account. Sending and receiving the mail, use of search engine. Net Surfing	MS –EXCEL. Starting excel, open Worksheet. Enter, exit, Data formulas to Calculate values, format Data. Create chart, printing Chart, save worksheet, Switching from another spread sheet Menu Commends: Create, format charts, organize, manage date, solving problem by analyzing data exchange with other applications Programming with MS-Excel, getting information while working. Internet. Log-in to internet, Creating E-mail account, E-mail sending and receiving e-mail, creating an address book, Attaching a file with e-mail message. Save net contents.
5.	Basic knowledge of CAD software Knowledge of different Modules Utility of CAD Software. Knowledge of digitizer – its working and importance	Practice of different commands to be used in pattern making Practice of digitizer a pattern & working on Digitizer pattern.
6.	Grading – Introduction, Methods of Grading & Grading rules. Knowledge of plotter- its working & importance	Practice of entering sizes, Grading tables etc. Practice of grading upper body garment (Front, back, sleeve, collar, cuff, facing etc) Practice of grading lower body garment (front back, fly, belt etc.)
7& 8	Introduction to marker, Technical terms related to marker according to apparel Industry. Drafting Techniques	Practice to making different marker, markers on different widths, different print, checks etc, matching of pattern, Report generation. Practice of making Drafts of different garments Such as – Frocks, Blouses, Cholicut Blouse, Boys shirts, Shirts, Kurtas, Ladies Shirt with salwar/churidar pyazama, Skirts, shirts. Trousers.

Note : After completion of the course trainee can work as Assistant Pattern Master/CAD Operator in any Garment Export House.

I) Tools, Machinery Equipment etc. for a batch of 16 Trainee

Computer Lab

Sl. No	Description	Quantity
Software		
1	Software Corel Draw, Photoshop, Adobe Illustrator, Image ready, Idea or equivalent (Licensed Version)	As reqd.
2	Software for Pattern Making, Grading and Marker making (latest version)	17 No.
3	Software for Textile Designing (latest Version) Fashion Studio	17 No.
4	Software for 3D Simulation (latest version)	17 No.
General Machinery		
1a	Pentium IV Computer or latest (Server - Linux) 2.8 GHz & above, 1GB RAM,80gGB HDD,DVD Combo Drive ,15" Monitor, optical scroll mouse, multimedia key board, 32bit LAN card with UPP port, necessary Drivers	1No
b	Pentium IV Computer or latest (Client windows XP or higher),2.8 GHz,512 MB RAM,40/80 GB HDD, DVD Combo Drive,15"/17"Moniter, optical scroll mouse, multimedia key Board, LAN card, necessary Drivers & Antivirus software	16 No
c	Networking: Above computer systems connected in LAN	
d	Broad Band internet Connection, minimum speed 256 kbps	
2	UPS 500 VA or Centralized UPS with 5 KVA Capacity	17 or 1No
3	Desk Top Laser Printer	2 No
4	Inkjet Printer	1No
5	Scanner	1No
6	LCD Projector with Screen	1No
7	Overhead Projector with Screen	1No
Workshop Furniture		
1	Instructor Table and Chair	1No each
2.	Computer Table	17 nos.
3.	Revolving Chair	17 nos.
4.	White Board with Accessories	01 no.
5.	Shoe Rack	As required
6.	Locker with 8 drawers (standard size)	02 nos.
7.	Storage Almirah	As required
8.	Book Shelf (Glass Panel)	01 no.

For Theory Room

Sr. No.	Details	Remarks
1	Chair with armrest and writing pad	16 Nos.
2	White Board	Minimum 1 No.
3	Audio System of good sound quality OR Public Address System within the Class Room range	Minimum 1 No.
4	Overhead Projector with high quality inbuilt thermostat Condenser & Twin Lamp	Minimum 1 No.
5	Teaching Transparency OR Other Teaching Aid.	As per Requirement
6	Multimedia Projector (with all attachment)	Minimum 1 No.

For Practical Room

Sr. No.	Details	Remarks
1	White Board	1 No.
2	Air Conditioner Split Type 1.5 TON	1 No.

- Neat and Clean premises duly painted.

- Cold drinking water facility should be provided.

- Classrooms and Lab facility available as per the requirement of the course.

- Proper Lighting and ventilation provided.

- Proper storage facility available to store the components, meters, etc.

"A" class electrical line laying done with proper Earthing to avoid hazards.

SECTOR / AREA : APPAREL

BROAD BASED BASIC TRAINING

(First Year)

MODULE - VI
QUALITY CONTROL, FINISHING AND PACKING

(Duration - 8 Weeks)

BROAD BASED BASIC TRAINING
(First Year)

MODULE – VI : QUALITY CONTROL, FINISHING AND PACKING
(Duration - 8 Weeks)

Sub Module – Quality Control :

Week No.	Theory	Practical
1	Introduction of Quality Control Requirement of an effective and adequate quality control Nature of different fabrics (knits and woven) Fabric weaving, texture, colour fastness, durability, manufacturing process defects etc. Shrinkage treatment (cotton, woolen, silk and Blended)	Inspection of Fabric Defects Inspection of cut components Fabric testing for different qualities of fabric as colour fastness Air porosity etc. Methods of shrinking treatment for different fabric.
2.	Study ….. Auditing Report Important and necessity of Inspection proceeding ISO standards	Checking parameters Practice of Checking semi furnished and finished garments.
3.	Study of Quality Checking & Measuring Garments based on given specification. Checking fit and Style as per buyer's original sample. Study of different designs, its placement with notches, workmanship & Stitches per inch.	Quality Checking and Measuring Garments based on given specification. Checking fit and style as per buyer's original sample.
4.	Study of Quality Checking and Measuring in respect of finishing parameters, washing parameters (shrinkage, shade variation, shade etc.)	Importance and necessity of Inspection Inspection procedure ISO Standards
Sub Module – Finishing and Packing		
5	Introduction of different machines (Body forming machine, leg press, Buck press, Vacuum steam press Table) Introduction of Finishing Processes.	Tools & Equipment used in finishing Processes.

Week No.	Theory	Practical
6.	Different Pressing Methods as per fabric requirements. Importance of pressing. Stains – Identification and their removal Labels – their kinds & use	Pressing of Shirt, Kurta, Salwar, Trousers , Skirt & Blouse. Practice of Stain removing from different fabrics with the help of Stain removing gun & Stain removing machines. Knowledge of Label position according to purpose & instructions.
7.	Introduction to advanced pressing, folding & packing equipment. Introduction to latest packing material (such as Collar patti, butter fly PVC patti, Moti pin, stand patti & Packing sheet etc.)	Practical exposure to latest equipment related to finishing, packing & folding process. Practice of pressing , Folding & packing of different garments.
8.	One Week on the job training in Garment Export House.	

Note : After completion of the course trainee can work as Asst. Quality Controller in any Garment Export House.

II) Tools, Machinery Equipment etc. for a batch of 16 Trainee

Sr. No	Description	Quantity
	Trainee Toolkit	
1	Measuring tools – wooden scale, arm sticks(all types), Measure tap, ruler (wooden), Ruler (steel) (24”)	17 nos.
2	Cutting Seizers 6”	17 nos.
3	Pick glass 1” size	17 nos.
4	Inspection glass with border (light)	17 nos.
5	Different type of dummies – children, ladies and gents	As per Requirement
6	Different type of cloth hanger	As per Requirement
7	Scissor 10’	17 nos.
8	Magnifier glass	17 nos.
9	Paper Sticker (Different Colors)	100 Nos.
10	Color Marking Chalk for Cloth (Different Colors)	50 Nos.

Sr. No	Description	Quantity
	General Machinery	
1	Fabrics Inspection Machine	1 No
2	Modern Lab to prepare according to the Quality Checking	1 No
3	Latest Multimedia Computer System with Printer & Scanner with all necessary license software for preparation of quality checking sheet	1 No
	General Shop Outfit	
1	Rack for fabrics roll	1 no.
2	Steel cupboard	1 no.
3	Table and Chair (for C.I.)	1 no.
4	Cutting table : 4X8' X3' (With sunmika)	1 no.
5	Trolley	2 nos.
6	Inspection Table (6' x 4') with glass top and inside lighting facility	2 Nos.

II) Tools, Machinery Equipment etc. for a batch of 16 Trainee

Sr. No	Description	Quantity
	General Machinery	
1	Mini Boiler - 1 No. Vaccum Table - 2 Nos. Electrion Iron - 2 No.s	1 Set (With Buck)
2	Shirt Folding Table	1 No.
3	Stain Removing Gun (with Compressor)	1 No.
4	Snap Attaching Machine	1 No.
5	Thread Sucking Machine	1 No.
6	Vacuum Pump	1 No.
	General Shop Outfit	
1	Table square-wooden	11 Nos.
2	Specified pressing table with dye attachment	01 No.
3	Table and chair (for C.I.)	01 No.
4	Pressing table 4' X 6 ' X 3' (with table cloth)	02 Nos
5	Heavy duty steam iron Electrical	2 Nos.

III) Other Requirements

For Theory Room

Sr. No.	Details	Remarks
1	Chair with armrest and writing pad	16 Nos.
2	White Board	Minimum 1 No.
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4	Overhead Projector with high quality inbuilt thermostat Condenser & Twin Lamp	Minimum 1 No.
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6	Multimedia Projector (with all attachment)	Minimum 1 No.

For Practical Room

Sr. No.	Details	Remarks
1	White Board	1 No.
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