

Syllabus
For the trade of
Fashion Technology

Under CTS

2002

Designed by

Government of India
Ministry of Labour (D.G.E.&T.)
CENTRAL STAFF TRAINING AND RESEARCH INSTITUTE
EN – Block, Sector – V, Salt Lake,
Kolkata-700091

**List of Members of the Trade Committee Meeting approved the syllabus for the trade of
“Fashion Technology” under CTS .**

1.	Shri H.Somasundaram	Director, CSTARI, Kolkata	Chairman
2.	Mrs. Dipali Jana	Faculty, NIFT	Member
3.	Shri Aniruddha Ghosh	Faculty, GIFT	Member
4.	Mrs. Purnima Mondal	Proprietor Swarupa School of Sewing & knitting	Member
5.	Shri T. Mukhopadhyay	DDT, CSTARI	Member
6.	Shri S. Kant	DDT, CSTARI	Member
7.	Shri S. Kumar	DDT, CSTARI	Member
8.	Shri G. Nandi	Jr. D/Man, CSTARI	Member

GENERAL INFORMATION

1. Name of the Trade : Fashion Technology
2. NCO code No. :
3. Duration of Craftsmen Training : One Year (52 Weeks)
4. Entry Qualification : Passed 12th Class under 10+2 system or equivalent
5. Unit Strength : 16 Trainees
6. Space Requirement : 3.5 sq.mt. per trainee

Syllabus for the trade of "Fashion Technology" under C.T.S.

Duration : One Year

Week No	Practical	Theory
1 – 2	Familiarization with the Institute. Importance of trade training. Instruments used in the trade. Types of work done & job made by the trainees in the trade. Introduction to safety. Identification of fibres Yarn count and yarn twist – Determination of the yarn slippage of various fabrics.	Importance of safety and general precautions observed in the Institutes and in the section. Evolution of garment, fashion terminologies. Introduction to Textile Fibres – Classification and characteristics. Types of yarns, properties of different yarns.
3 – 4	Fabric count and balance of fabric. Determination of colour fastness of various fabrics.	Basic fabric study Fabric types and suitability <ul style="list-style-type: none">• Woolen fabrics• Knitted fabrics• Laced fabrics• Blended fabrics• Nets.
5 – 6	Determination of dimensional stability of different fabrics with/without shrinkage level.	Weaving, Knitting, Finishing, Dyeing and Printing <ul style="list-style-type: none">• Mechanical finishes• Chemical finishes• Dyeing• Printing
7 – 8	Methods of removing stains from different fabrics. Collecting samples of fabric with different weaves.	Laundrying and care of different types of textiles – <ul style="list-style-type: none">• Colour fastness tests• Stain Removal• Storage• Maintenance of clothes• Dry cleaning• Use of starches and whitening agents.

9 - 10	<p>Identification and maintenance of tools and equipment of dress-making.</p> <p>Sewing machines – main parts, functions and care (cleaning, oiling etc.)</p> <p>Main adjustments while operating sewing machine, special attachments and their use minor defects, detection and rectification selection and use of different threads and needles for various fabrics</p>	<p>Tools and equipment for measuring, marking, cutting, sewing pressing and finishing.</p> <p>Sewing machine – Types, main parts, minor defects and their remedy, correct sitting posture.</p>															
11-17	<p>Making samples of the following: - Temporary, permanent decorative stitches, seams, Disposal of fullness.</p> <p>Drafting of basic bodies blocks for children and women. Dart manipulation, basic sleeve & variations, color variation, semi fitted vest, torso block, panel cutting, facings, shirt, trouser, T-shirt, jacket.</p> <p>Adopting the basic blocks for making the following garments –</p> <table border="1"> <thead> <tr> <th>Children</th> <th>Women</th> <th>Men</th> </tr> </thead> <tbody> <tr> <td>Jangia</td> <td>House coat</td> <td>Shirt</td> </tr> <tr> <td>Frock</td> <td>Petticoat</td> <td>Trouser</td> </tr> <tr> <td>Slacks</td> <td>Saree Blouse</td> <td>Kurta</td> </tr> <tr> <td>Baba suit with Hood</td> <td>Salwar kameez</td> <td>Payjama</td> </tr> </tbody> </table> <p>Finishing, pressing and folding of the above garments. Finding fitting defects of the garments. Rectification of defects of fitting.</p>	Children	Women	Men	Jangia	House coat	Shirt	Frock	Petticoat	Trouser	Slacks	Saree Blouse	Kurta	Baba suit with Hood	Salwar kameez	Payjama	<p>Introduction to paper pattern, type of paper pattern, pattern making tools, pattern making terms, pattern production terms, purpose, method and their use in layout and cutting, pattern grading. Information on paper patterns, marks of fitting position, balance marks etc. Sleeves, basic sleeve pattern, alteration, different types of sleeve patterns.</p> <p>Collars – Convertible and non-convertible collars, different types on collar patterns, standard measurement chart for men, women and children, standard measuring techniques.</p> <p>Calculation of body measurements from chart and height measurements.</p> <p>Method of developing bodice block : front and back.</p> <p>Method of adopting bodice block for developing garment pattern.</p> <p>Knowledge and use of fastening stitches, embroidery stitches, special equipment for stitching and special machines for over lock, button stitch, flat lock, feed off the arm, button hole, cutting by m/c, fusing by m/c, grading system etc.</p> <p>Study of process of commercial production of : Collecting material for production, Laying, Marking, Cutting, Stitching, Finishing, Checking, Laundering, Pressing and Packaging etc. Ready made garments: their importance and selection.</p>
Children	Women	Men															
Jangia	House coat	Shirt															
Frock	Petticoat	Trouser															
Slacks	Saree Blouse	Kurta															
Baba suit with Hood	Salwar kameez	Payjama															
18-21	<p>Costing of garments. Taking orders from market. Attachments and machines. Estimation of materials.</p>	<p>Basic processes for garment making. Basic stitches, Hand stitches, Decorative stitches, Seams and seam finish.</p>															

		<p>Principles of garment making. Preparation of fabric Placing, marking and cutting, selection of fabric suitable for age, occupation, figure types, fashion. Trimming and lining How to cut actual pattern measurements Disposal of fullness : Pleats, Darts, tucks, Shirring, Ruffles, Smocking. Plackets: Commonly used plackets. Fastenels: Different types of fasteners Edge Finishers: Different type of edge finishers Fitting: Standard for fitting : Ease, Lines, grain, set, balance, reasons for poor fitting Characteristic features of well finished garments, evaluation of well fitted and well finished garments. Collars, Sleeves, Pockets, Necks, Yokes and Belts. Defects and remedies of fitting, finding out the defects in fitting and suggesting remedies for the defects.</p>
22-25	<p>Basic lines Colour – Colour wheel, colour combination and schemes. Market survey for 3-4 days and report should be submitted.</p>	<p>Design – Purpose, Mental plan, Preliminary sketch, adaptation of means to end. Source of inspiration for Designing – Geometrical shapes, abstract sources, nature, mythology, architecture, historic costume, national or peas and costume. Classification of lines, effect of lines, dominant lines, optical illusion. Study on colours, MOTIFS (Enlargement & Reduction) Colour system, warm colours and cool colour, psychological effect of colour, colour schemes. Selection of colour on the basis of personal colouring and personality. Design – Purpose, Mental plan, Preliminary sketch, adaptation of means to end. Idea of marketing.</p>
26-27	<p>Textural combinations</p> <ul style="list-style-type: none"> • Optical illusion • Silhouette • Dropped Garments. 	<p>Texture – Fiber content, Yarn structure and nature, Fabric finishes. Factors influencing silhouettes, human figure, carriage, suitability, fashion & fashion trends.</p>

28-29	<p>Principles of design – Harmony, Rhythm, Proportion and scale, balance, emphasis</p> <p>Sketching-Fashion figures (Human figure) proportions</p> <p>Fashion drawing - Basic shapes, figure drawing, stylised figures, fabric rendering, flat sketches, accessory drawing, fold & gathers, shirring etc.</p>	<p>Principles of Design (Human figure) : – Balance – Formal Balance, Informal or Asymmetric Balance, Perpendicular Balance, Radial Balance.</p>
30-31	<p>Basic shapes stitching, quilting, pleats, darts & gathers, seams, facings, panels, plackets (front & sleeve) flat & stand collar, pockets (patch, welt & bone), pipings, cuffs, zipper attaching, shirt, trouser, ladies top, skirt, ladies one piece dress, vest, T-shirt.</p>	<p>Proportion: -</p> <p>Rhythm: Repetition, harmonic repetition, Progression or gradation continues line movement, radiation.</p> <p>Emphasis –</p> <p>Harmony or unity</p> <p>Sauce – Psycho aspects of clothing</p> <p>First impression</p> <p>Clothing and wearer</p> <p>Personality factors and choice for clothes</p> <p>Society and clothing choices</p> <p>Clothing awareness</p> <p>Conformity and non-conformity</p>
32-33	<p>Sketching practice on fashion illustration.</p>	<p>Fashion Illustration –</p> <p>Materials used for sketching</p> <p>Female figure, Lay figure, ten head lay figure.</p> <p>Pattern making theory - dropping & drafting, idea about sloper, pattern & working block.</p> <p>How to take measurements, pattern terminology.</p>
34-35	<p>Adjustment and alteration of pattern method for various figure problems.</p> <p>Use of various types of dummies</p>	<p>Fashion – Origin – costumer from medieval to modern period, sources, factors favouring and retarding fashion cycle, role of fashion in the garment industry.</p> <p>Silhouette – Factors determining character and quality, knowledge of current silhouette, their interpretation and adaptation.</p>
36-39	<p>Designing, planning, adopting of garments under the following heads:</p> <p>Sport wears – shorts and shirts with emphasis on pockets, collars, belt and belt carrier etc.</p>	<p>Dress Designing for different figures design, principle of design, current fashions with special emphasis on texture and plaids, Design for figure problems.</p> <p>Designing of dresses for women and men</p>

	<p>Children - Fancy frocks, self-help (with velcro fastening) garments, sun-suits with special emphasis on methods of fullness, frills, trimmings collars, sleeves, belts etc.</p> <p>Women- blouse, petticoat, trousers, saluar-suits with emphasis on necklines, sleeves, trimmings, pockets and openings.</p> <p>Men-Trousers, shirts, safari suit with special emphasis on pockets, collars.</p> <p>Miscellaneous-Apron with special emphasis on reams and pockets.</p>	<p>with special emphasis on : Special features, planning the dresses, design details, drafting of various garments: Plain blouse, choli blouse, high neck blouse, kameez, modern salwar, plain skirt, shirt, pants, coat.</p> <p>Different fabrics in relation to different textures : Study of different fabrics in relation to different textures.</p>
40-43	Innovating traditional embroidery stitches and techniques on the fabrics. Different types of machine embroidery & hand embroidery (ten types).	History of textiles like phulkari, kantha, patola, baluchuri, benarasi, chikan, silk, kashmiri & gujrati stitch. Basic 10 types of embroidery.
44	Visits to ready made garment industries	Idea on garment production systems, garment breakdown of shirt & trouser, concept of assembling by flow chart, idea on trimmings, idea on departments of garment manufacturing & their working, product life cycle & its stages, idea on machine attachments, types of garment industry & m/c requirement.
45-48	<p>Market survey</p> <p>Developing a consumer profile</p> <p>Developing a garment profile</p> <p>Layout plans for a unit</p> <p>Project report plan for a unit</p> <p>Management for a unit.</p>	<p>Basic concepts of marketing</p> <p>Definition, basic concepts - needs, wants.</p> <p>Demands, product, value and satisfaction, exchange and transaction, market</p> <p>Simple marketing system, Marketing and marketer</p> <p>Consumer behavioral</p> <p>Model of consumer behaviour</p> <p>Factors influencing consumer behaviour-cultural, social, personal and psychological, buying behaviours, buying decision process</p> <p>Market Research – Definition and objectives developing the research plan, collecting information, analyzing information, presenting and findings.</p> <p>Types of marketing, bases for segmenting consumer markets, single variable and multivariable segmentation, requirement for effective segmentation, market targeting selecting the marketing strategy, product positioning.</p> <p>Setting of price: Objectives, determining demand, estimating cost, analyzing,</p>

		<p>competition prices and offers. Selecting the pricing method, selecting the final price. Sales promotion – Advertising, publicity, personal selling.</p>
49-51	<p>Calculation of fabric and manufacturing for different garments according to size, style and design. Computer operation practices and knowledge of related softwares. Prepare the estimate of material in computer.</p>	<p>Idea of collection, computer application, client selection, modern designers & their creations, Basic knowledge of computer, Project work</p>
52	Revision & Test	

List of Tools & Equipments for the trade of "Fashion Technology" under CTS
(For a batch of 16 trainees)

<u>Sl. No.</u>	<u>Name & Description of Articles</u>	<u>Qty.</u>
Tools & Machineries :		
1.	Lock Stitch (Industrial m/c)	17 nos.
2.	Over locking machine	1 no.
3.	Twin needle (motorised) (3 thread & 5 thread)	1 each
4.	Bar-tack machine	1 no.
5.	Button hole machine	1 no.
6.	Machine attachment zipper foot, tucker foot, hem folder	2 each
7.	Scissors 25 cm	17 nos.
8.	Scissors left hand 25 cm	2 nos.
9.	Machine scissors, trimming edge 7"	17 nos.
10.	Pinking scissors, edge finish	4 nos.
11.	Marking wheel (tracing wheel)	17 nos.
12.	Measuring Tape Metric & English 150 cm (inches & cm)	17 nos.
13.	Tailors square metric	17 nos.
14.	Leg shaper for trouser	17 nos.
15.	French curve (set) no.17	17 nos.
16.	Diagram square 1/4", 1/5" plastic	17 nos.
17.	Finger timbles - steel	17 nos.
18.	Pattern notcher	4 nos.
19.	Dress from dummies : a) ladies 8,10 (half), 12(full), b) Gent's 40,42 (full) c) children no. 4 (full)	2 nos. each.
20.	Round knife cutter, electrically operated	1 no.
21.	Straight knife cutter, electrically operated	1 no.
22.	Tape plastic	2 nos.
23.	Tailors chalk	17 box
24.	Seam ripper	5 nos.
25.	Milton board double width x 2 meters	8 nos.
26.	Coat brush -nylon hair	2 nos.
27.	Pattern hanging angle steel	2 nos.
28.	Stand wooden T shaped for hanging dress	4 nos.
29.	Hangers steel/wooden	20 nos.
30.	Tailors Art curve	5 nos.
31.	Button hole scissors	5 nos.
32.	Latest Computer with multimedia, windows operating system & software of latest version like MS- office, Photoshop, fashion studio, auto CAD etc.	2 nos.
33.	Inkjet printer minimum of 1200 dpi	2 nos.
34.	UPS 1 KVA	2 nos.

<u>Sl No.</u>	<u>Name & Description of Articles</u>	<u>Qty.</u>
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Pressing Equipment :

1.	Electric steam iron	4 nos.
2.	Pressing Table	4 nos.
3.	Duplex board	2 nos.
4.	Rubber mat for pressing table	4 nos.
5.	Water tub big 60 cm dia for sinking	1 no.
6.	Water pot for pressing table	1 no.
7.	Blanket with fabric for pressing table (5 x 8 ft.)	4 nos.
8.	Wall clock	1 no.
9.	Sponge nylon for putting water	16 nos.
10.	Water sprayer	1 no.

Furniture :

1.	Instructors table steel with sunmica top (60 x 120) with lockers	1 no.
2.	Arm chair for instructor	1 no.
3.	Armless chair for staff	4 nos.
4.	Adjustable moving stool with cushion 18" height size for trainees	16 nos.
5.	Table for drawing class/theory class for trainees	16 nos.
6.	Magnetic white board with marker pen and duster (120 x 120 cm)	2 nos.
7.	Almirah steel (195 cm x 90 cm x 60 cm) with 5 adjustable shelves	2 nos.
8.	Steel locker overall size (195 cms x 90 cms x 48 cms) having 6 compartments with provision of separate lock	3 nos.
9.	Display board glass cover (for hanging finished dress)	2 nos.
10.	Pattern hanging hooks	6 doz.
11.	Drafting table with corrugated board (150 cm x 90 cm x 90 cm)	8 nos.
12.	Calculator desk type	1 no
13.	Waste paper basket, plastic/steel	2 nos.
14.	Over head projector with trolley & screen	1 no.
15.	Computer tables with chairs/stools.	2 nos.
16.	Printer tables	2 nos.
17.	Fire Extinguisher	2 nos.