



GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP
DIRECTORATE GENERAL OF TRAINING

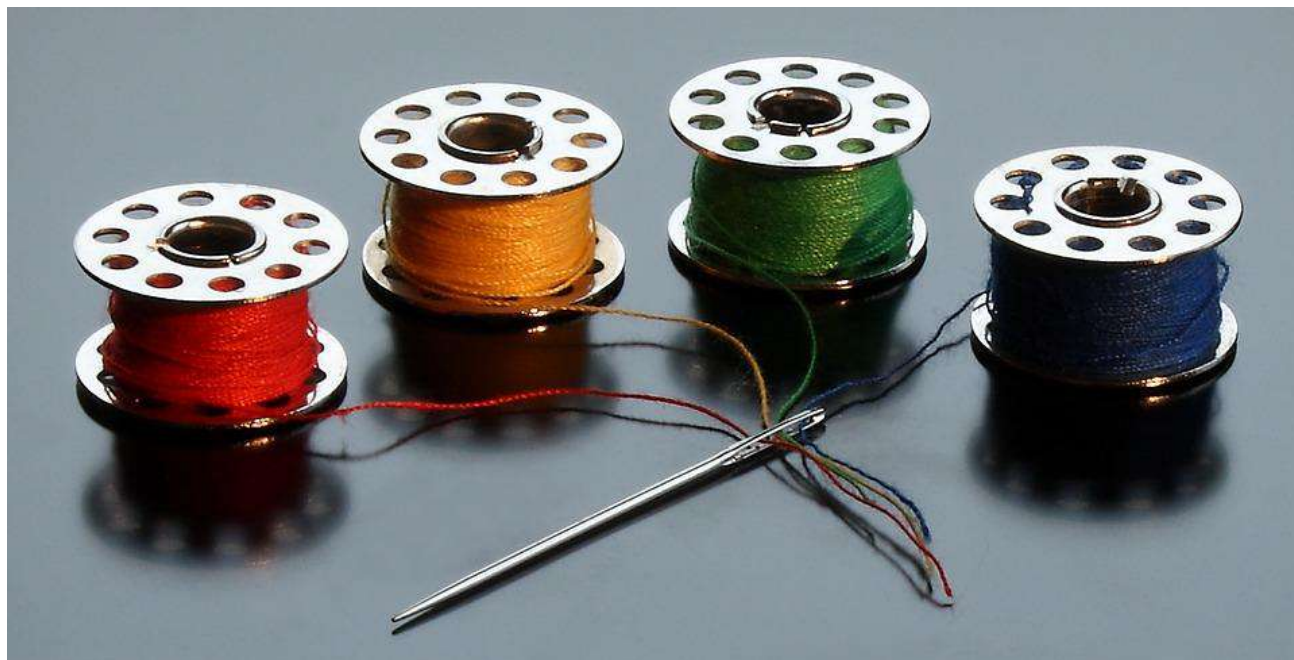
COMPETENCY BASED CURRICULUM

SEWING TECHNOLOGY

(Duration: One Year)

CRAFTSMEN TRAINING SCHEME (CTS)

NSQF LEVEL- 4



SECTOR –APPAREL



Directorate General of Training

SEWING TECHNOLOGY

(Non-Engineering Trade)

(Revised in 2019)

Version: 1.2

CRAFTSMEN TRAINING SCHEME (CTS)

NSQF LEVEL - 4

Developed By

Ministry of Skill Development and Entrepreneurship

Directorate General of Training

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CONTENTS

SNo.	Topics	Page No.
1.	Course Information	1
2.	Training System	2
3.	Job Role	6
4.	General Information	7
5.	Learning Outcome	9
6.	Assessment Criteria	11
7.	Trade Syllabus	18
	Annexure I (List of Trade Tools & Equipment)	27
	Annexure II (List of Trade experts)	30

1. COURSE INFORMATION

During the one-year duration of “Sewing Technology” trade, a candidate is trained on Professional Skill, Professional Knowledge and Employability Skill related to the job role. In addition to this, a candidate is entrusted to undertake project work, extracurricular activities and on-the-job training to build up confidence. The broad components covered under Professional Skill subject are as below: -

The skill training starts with making hand stitches in the given fabric; stitching the following using the given fabric: Seams with seam finishes, Darts, Pleats, Tucks, Gathers & Shirrs, Frill, Hem, Casing, Edge Finishing, Neck lines, Placket, Pocket, Collar, Sleeves, Cuff. The trainee learns how to fix the fasteners on the given fabric, mend the given fabric as per requirement. He/she is also able to draft a pattern for Ladies' Suit & Sew a Ladies' Suit with the help of the given pattern.

In the later phase of the course, the trainee is trained to sketch different varieties of garments like ladies' Tops/Short kurties, ladies' Suit, Nightwear (one piece/two piece), Sari blouse, dresses for new born, toddler & kids etc. He/ she constructs the various garments like sari petticoat, ladies' top/short kurties, ladies' Suit, nightwear (One Piece with Yoke, Two Piece – Night suit), sari blouse (Simple Model - Plain), dress for a Newborn(Jhabla), dress for a Toddler (Sun-Suit), Kids(Frock), Gent's Kurta and Pyjamas, Casual Shirt and Trousers with fitting and quality according to the sketched designs.

2. TRAINING SYSTEM

2.1 GENERAL

The Directorate General of Training (DGT) under Ministry of Skill Development & Entrepreneurship offers a range of vocational training courses catering to the need of different sectors of economy/ Labour market. The vocational training programmes are delivered under the aegis of Directorate General of Training (DGT). Craftsman Training Scheme (CTS) with variants and Apprenticeship Training Scheme (ATS) are two pioneer schemes of DGT for strengthening vocational training.

‘Sewing Technology’ trade under CTS is one of the courses delivered nationwide through a network of ITIs. The course is of one-year duration. It mainly consists of Domain area and Core area. The Domain area (Trade Theory & Practical) imparts professional skills and knowledge, while the core area (Employability Skill) imparts requisite core skills, knowledge, and life skills. After passing out the training program, the trainee is awarded National Trade Certificate (NTC) by DGT which is recognized world-wide.

Candidates broadly need to demonstrate that they are able to:

- Read and interpret parameters/documents, plan and organize work processes, identify necessary materials and tools;
- Perform tasks with due consideration to safety rules, accident prevention regulations and environmental protection stipulations;
- Apply professional skill, knowledge & employability skills while performing jobs.
- Document the parameters related to the task undertaken.

2.2 PROGRESSION PATHWAYS

- Can join industry as Tailor (Craftsman) in general and will progress further as Master Tailor (Senior Craftsman), Supervisor and can rise up to the level of Manager.
- Can become Entrepreneur in the related field.
- Can join Apprenticeship programs in different types of industries leading to a National Apprenticeship certificate (NAC).
- Can join Crafts Instructor Training Scheme (CITS) in the trade for becoming an instructor in ITIs.
- Can join Advanced Diploma (Vocational) courses under DGT as applicable.

2.3 COURSE STRUCTURE

Table below depicts the distribution of training hours across various course elements during a period of one year: -

S No.	Course Element	Notional Training Hours
1	Professional Skill (Trade Practical)	1200
2	Professional Knowledge (Trade Theory)	240
3	Employability Skills	160
	Total	1600

2.4 ASSESSMENT & CERTIFICATION

The trainee will be tested for his skill, knowledge and attitude during the period of course through formative assessment and at the end of the training programme through summative assessment as notified by the DGT from time to time.

a) The **Continuous Assessment** (Internal) during the period of training will be done by **Formative Assessment Method** by testing for assessment criteria listed against learning outcomes. The training institute has to maintain an individual trainee portfolio as detailed in assessment guideline. The marks of internal assessment will be as per the formative assessment template provided on www.bharatskills.gov.in.

b) The final assessment will be in the form of summative assessment. The All India Trade Test for awarding NTC will be conducted by Controller of examinations, DGT as per the guidelines. The pattern and marking structure are being notified by DGT from time to time. **The learning outcome and assessment criteria will be the basis for setting question papers for final assessment. The examiner during final examination will also check** the individual trainee's profile as detailed in assessment guideline before giving marks for practical examination.

2.4.1 PASS REGULATION

For the purposes of determining the overall result, weightage of 100% is applied for six months and one-year duration courses and 50% weightage is applied to each examination for two years courses. The minimum pass percent for Trade Practical and Formative assessment is 60% & for all other subjects is 33%. There will be no Grace marks.

2.4.2 ASSESSMENT GUIDELINE

Appropriate arrangements should be made to ensure that there will be no artificial barriers to assessment. The nature of special needs should be taken into account while undertaking the assessment. Due consideration should be given while assessing for teamwork, avoidance/reduction of scrap/wastage and disposal of scrap/waste as per procedure, behavioral attitude, sensitivity to the environment and regularity in training. The sensitivity towards OSHE and self-learning attitude are to be considered while assessing competency.

Assessment will be evidence based comprising the following:

- Job carried out in labs/workshop
- Record book/ daily diary
- Answer sheet of assessment
- Viva-voce
- Progress chart
- Attendance and punctuality
- Assignment
- Project work

Evidences and records of internal (Formative) assessments are to be preserved until forthcoming examination for audit and verification by examining body. The following marking pattern to be adopted while assessing:

Performance Level	Evidence
(a) Weightage in the range of 60%-75% to be allotted during assessment	
For performance in this grade, the candidate should produce work which demonstrates attainment of an acceptable standard of craftsmanship with occasional guidance, and due regard for safety procedures and practices	<ul style="list-style-type: none"> • Demonstration of good skills and accuracy in the field of work/ assignments. • A fairly good level of neatness and consistency to accomplish job activities. • Occasional support in completing the task/ job.
(b)Weightage in the range of 75%-90% to be allotted during assessment	
For this grade, a candidate should produce work which demonstrates attainment of a reasonable standard of craftsmanship, with little guidance, and regard for safety	<ul style="list-style-type: none"> • Good skill levels and accuracy in the field of work/ assignments. • A good level of neatness and consistency to accomplish job activities.

procedures and practices	<ul style="list-style-type: none"> • Little support in completing the task/job.
(c) Weightage in the range of more than 90% to be allotted during assessment	
<p>For performance in this grade, the candidate, with minimal or no support in organization and execution and with due regard for safety procedures and practices, has produced work which demonstrates attainment of a high standard of craftsmanship.</p>	<ul style="list-style-type: none"> • High skill levels and accuracy in the field of work/ assignments. • A high level of neatness and consistency to accomplish job activities. <p>Minimal or no support in completing the task/ job.</p>

Tailor, General: makes ladies and gents' garments and children's clothes by stitching various components together according to pattern, by hand or sewing machine. Measures customers for size with inch-tape and record measurements for making garments. Cuts material according to pattern and size and assembles garment parts by sewing. Fits stitched garment on customer, marks alterations to be made and finishes garments. May prepare new designs and Masden Lays and supervise sewing, stitching, button holing, etc. delegated to other workers. May also repair and renovate garments.

Sampling tailor; is responsible for developing garment sample as per buyer's specifications in the apparel industry. A sampling tailor should be able to perform basic fabric cutting operations and stitch garments of various designs with different necklines, sleeves, collar etc. as per the quality standards. This job requires the individual to have thorough knowledge of measurements, garment styles, sampling and apparel production processes and should be able to sew garments with different materials and trims.

Dress Maker/ Ladies Dress Maker; stitches together parts of women's garments such as dresses, blouses, jumpers, brassieres, etc., according to instructions of Master Cutter. Stitches together parts by hand and machine. Inserts inner material, makes embroidery work, button-holes, etc., and attaches lining, lace, button, etc. Carries out alteration as directed. May press garments and supervise work of Sewer, Hand.

Reference NCO- 2015:

- (i) 7531.0100 – Tailor, General
- (ii) 7531.0101 – Samplingtailor
- (iii) 7531.0200 –Dress Maker/Ladies Dress Maker

4. GENERAL INFORMATION

Name of the Trade	Sewing Technology
Trade Code	DGT/1011
NCO – 2015	7531.0100, 7531.0101 ,7531.0200
NSQF Level	Level-4
Duration of Craftsmen Training	One Year (1600 Hours)
Entry Qualification	Passed 8 th class examination
Minimum Age	14 years as on first day of academic session.
Eligibility for PwD	LD,CP,LC,DW,AA,LV,DEAF,HH,AUTISM,ID,SLD
Unit Strength (No. of Student)	20(There is no separate provision of supernumerary seats)
Space Norms	64Sq. m
Power Norms	5 KW
Instructors Qualification for:	
(i) Sewing Technology Trade	<p>B.Voc/Degree in Fashion & Apparel Technology from UGC recognized College /university with one-year experience in the relevant field.</p> <p style="text-align: center;">OR</p> <p>Diploma (Minimum 2 years) in Garment fabrication Technology/ Costume Design & Dress Making from recognized board of technical education or relevant Advanced Diploma (Vocational) from DGT with two years' experience in the relevant field.</p> <p style="text-align: center;">OR</p> <p>NTC/NAC passed in the Trade of "Sewing Technology" earlier named as "Cutting & Sewing" with 3 years experience in the relevant field.</p> <p>Essential Qualification: Relevant National Craft Instructor Certificate (NCIC) in any of the variants under DGT.</p> <p>Note: <i>Out of two Instructors required for the unit of 2(1+1), one must have Degree/Diploma and other must have NTC/NAC qualifications. However, both of them must possess NCIC in any of its variants.</i></p>

(ii) Employability Skill	<p>MBA/ BBA / Any Graduate/ Diploma in any discipline with Two years' experience with short term ToT Course in Employability Skills from DGT institutes. (Must have studied English/ Communication Skills and Basic Computer at 12th / Diploma level and above)</p> <p style="text-align: center;">OR</p> <p>Existing Social Studies Instructors in ITIs with short term ToT Course in Employability Skills from DGT institutes.</p>		
(iii) Minimum Age for Instructor	21 Years		
List of Tools and Equipment	As per Annexure – I		
Distribution of training on hourly basis: (Indicative only)			
Total Hrs./ Week	Trade Practical	Trade Theory	Employability Skills
40 Hours	30 Hours	6 Hours	4 Hours

5. LEARNING OUTCOME

Learning outcomes are a reflection of total competencies of a trainee and assessment will be carried out as per the assessment criteria.

5.1 LEARNING OUTCOMES (TRADE SPECIFIC)

1. Make hand stitches in the given fabric following safety precautions.
2. Stitch the following using the given fabric:
 - Seams with seam finishes
 - Dart
 - Pleat
 - Tucks
 - Gathers & Shears
 - Frills
 - Hems
 - Casing
 - Edge-Finishing
 - Neck line
 - Placket
 - Pocket
 - Collar
 - Sleeve
 - Cuff
3. Fix the fasteners on the given fabric.
4. Mend the given fabric.
5. Draft a pattern for Ladies' Suit and Sew a Ladies' Suit with the help of the given pattern.
6. Sketch the following garments:
 - Ladies' Tops/Short kurties
 - Ladies 'Suit
 - Nightwear (one piece/two-piece)
 - Sari Blouse
 - Dresses for New Born
 - Dresses for Toddler
 - Dresses for Kids
7. Construct the following garments with fitting and quality according to the sketched

designs:

- Sari Petticoat
- Ladies' Top/Short Kurties
- Ladies' Suit
- Nightwear (One Piece with Yoke)
- Nightwear (Two Piece – Night suit)
- Sari Blouse (Simple Model - Plain)
- Dress for a New-born(Jhabla)
- Dress for a Toddler (Sun Suit)
- Dress for Kids (Frock)
- Gent's Kurta and Pyjamas
- Gent's Casual-Shirt
- Gent's Trousers

6. ASSESSMENT CRITERIA

LEARNING OUTCOMES	ASSESSMENT CRITERIA
1. Make hand stitches in the given fabric following safety precautions.	Identify tools for Cutting, Sewing & Finishing and use of these tools with safety.
	Select suitable fabric. Select suitable needle size and sewing thread according to fabric.
	Straighten the fabric grain.
	Maintain the distance between two stitches. Take care about length and width of the stitches.
	Follow the color combination while doing the decorative stitches.
	Finish the edge of the fabric using hemming stitch.
	Follow the safe measures and needle guard policy while doing the sewing.
2. Stitch the following using the given fabric.	Identify tools for Cutting, Sewing & Finishing and use of these tools with safety.
	Select suitable fabric. Select suitable needle size and sewing thread according to fabric.
	Straighten the fabric grain.
	Sit in a correct posture and test the stitch formation in these wing machine.
	Use proper sewing aids while sewing the garment.
	Seams with seam finishes
	Use appropriate stitching techniques such as single pointed darts, plain seam, continuous placket, casing and decorative hem.
	Check the direction of darts.
	Finish the garment by applying suitable fasteners.
	Dart
	Mark the dart properly at the start and the end.
	Stitch the dart and knot the dart end.
	Press the dart.
	Pleat
	Mark the pleat lines.
	Stitch the pleat.
	Check distance in between the pleats.
Press the Pleat.	

	Tucks
	Mark the tuck lines.
	Stitch the tucks.
	Finish the stitching at the tuck end.
	Press the tucks.
	Gathers and Shirrs
	Marks the start and end of gathers.
	Check the equal distribution of gathers.
	Stitch in straight lines.
	Thread the overlock machine.
	Finish the free edge by overlock machine.
	Press the fabric at the end.
	Mark and cut the frill strips.
	Frills
	Finish the edge of the frill.
	Attach the frill to a fabric.
	Mark the hem with proper tools.
	Hems
	Maintain equal folding throughout the hem.
	Properly finish the corner in case of mitered hem.
	Mark the allowance for casing in the fabric.
	Casing
	Turn the fabric equally while stitching casing.
	Finish the edge of the casing at the opening side.
	Maintain the straight line while stitching.
	Make the bias strips.
	Edge finishing
	Join the bias strips properly.
	Attach the bias strip on the curved lines.
	Cut & clip in the curved lines.
	Maintain the shape of the necklines.
	Neckline
	Select the proper method of finishing the neckline.
	Follow perfection while stitching in curves.
	Maintain neatness and balance throughout the process.
	Finish the end point of the placket.
	Placket
	Mark and cut the finishing strips.

	Follow straight edge stitching.
	Select and mark the placement of the pocket.
	Pocket
	Stitch neatly the corners in case of patch pockets.
	Secure the ends of the pocket mouth.
	Follow neatness while sewing with the base fabric.
	Select suitable interlining and its facing for the main fabric.
	Collar
	Check the balance of the collars.
	Maintain shapes at the both ends of the collars.
	Follow sharp collar points while turning the collar.
	Check the fabric suits the sleeve style.
	Sleeve
	Cut the fabric for sleeve by following proper fabric grain.
	Finish the bottom of the sleeve neatly.
	Select suitable interlining material according to main fabric.
	Cuff
	Fix or Fuse the interlining to the main fabric.
Maintain neatness while sewing the corners of the cuff.	
Make neat top stitching on the cuff.	
Solve the sewing machine problems with suitable remedies after finding the causes.	
Follow the safe measures and needle guard policy while doing the sewing.	
3. Fix the fasteners on the given fabric.	Select a suitable fastener according to the requirement.
	Maintain neatness while starting and ending stage of fixing fasteners.
	Match male & female part of fasteners.
	Fix the size of the buttonhole according to the button.
	Follow equidistance and equal height with neatness of buttonhole stitches.
4. Mend the given fabric.	Select the thread with suitable color and quality for patching.
	Finish neatly the darned or patched piece.
5. Draft a pattern for Ladies' suit and Sew a Ladies' suit	Identify tools for measuring, marking, drafting & cutting and use of these tools with safety.
	Explain the measuring units and measuring techniques for required

Suit with the help of the given pattern.	measurements.
	Draft the pattern for a Ladies' Suit. Use the paper economically and check for shapes, front and back shoulder, side seams.
	Cut the pattern using shears properly along the cutting line and check cutting edges.
	Finish the pattern with pattern particulars.
	Identify tools for Sewing & Finishing and use of these tools with safety.
	Select suitable fabric for the garment and select suitable needle size and sewing thread according to fabric.
	Straighten the fabric grain.
	Place the patterns on the fabric and mark the pattern outline properly.
	Cut the components by selecting suitable tool.
	Make upper and lower threading in an Industrial Model single needle lock stitch machine.
	Sit in a correct posture and test the stitch formation.
	Sew the ladies' suit by applying the component making techniques.
	Use proper sewing aids while sewing the garment.
	Finish the garment by applying suitable fasteners.
Solve the sewing machine problems with suitable remedies after finding the causes.	
Follow the safe measures and needle guard policy while doing the sewing.	
6. Sketch the following garments. a. Ladies Tops/Short kurties. b. Ladies' Suit. c. Nightwear (one piece/two piece). d. Sari Blouse. e. Dresses for New Born. f. Dresses for Toddler. g. Dresses for Kids.	Select a suitable paper for sketching and plan the layout before starting sketching.
	Identify the suitable sketching items and use them properly.
	Sketch the garment.
	Select the proper colors and color combinations.
	Apply colors and shade on the sketch.
7. Construct the following garments with fitting and quality according to the sketched designs	Identify tools for Drafting, Cutting, Sewing & Pressing and use of these tools with safety.
	Decide the design features of the garment according to the sketching.
	Select the fabric and other raw materials suitable for the garment.
	Explain the measuring units and measuring techniques for required

	measurements.
	Draft the pattern for the garment. Use the paper economically.
	Cut the pattern using shears properly along the cutting line.
	Finish the pattern with pattern particulars.
	Straighten the fabric grain and prepare the fabric for cutting.
	Select and make a suitable economical pattern layout on the fabric and estimate the fabric consumption.
	Mark the pattern outlines properly and cut the components by selecting suitable shears.
	Identify and select the suitable industrial sewing machines for each process of constructing the garment.
	Select suitable needle size and sewing thread according to fabric.
	Make upper and lower threading in the required Industrial Model sewing machines.
	Sew the garments using the Industrial model sewing Machines with sewing aids by following proper seam and other allowances.
	Sari Petticoat
	Use appropriate stitching techniques such as single pointed darts, plain seam, continuous placket, casing and Circular/decorative hem.
	Check the direction of darts.
	Finish the garment by applying suitable fasteners.
	Ladies' Top/Short Kurties
	Select the particular seam type suited to the particular area of the garment.
	Check the front kurta placket, Faced neckline and squared hem.
	Check the neckline edge finished with facing of Kameez.
	Stitch neatly the Squared turned up bottom hem & Turned up sleeve bottom of Kameez.
	Maintain neatness in armhole joints and there should be no puckering at armhole joints in Kameez.
	Stitch neatly the according to the design of salwar bottom.
	Fold down the casing uniformly in salwar.
	Maintain proper positioning and distribution of cluster pleats in salwar.
	Finish the belt finishing of salwar properly.
	Nightwear (One Piece with Yoke)
	Stitch the yoke and neck in proper shape.

Use appropriate sleeve pattern.
Distribute the gathers properly.
Stitch with no puckering at armhole.
Finish the neckline properly with clean.
Finish the Turned-up hem neatly.
Make the flare of nightwear with proportion.
Nightwear (Two Piece – Night suit)
Stitch the Front placket of the Shirt neatly.
Finish the neckline with Convertible collar.
Stitch Full/Half plain sleeve with turned up bottom.
Make the Squared turned up bottom hem properly.
Stitch the two patch pockets with hem with proper position.
Maintain neatness while stitching Fold down casing and turned up hem in Simple Pyjamas.
Sari Blouse (Simple Model - Plain)
Select suitable fabric.
Check the dart positions.
Finish the neckline with pipings.
Sew Front Placket neatly.
Check the position and finishing of fasteners.
Finish the hemline neatly.
No puckering should be anywhere in the blouse.
Dress for a Newborn (Jhabla)
Select a smooth soft fabric suitable for a newborn baby.
Press studs or strings should be used.
Finish the turned-up hem.
Finish the Neckline and armhole with combined facings.
Dress for a Toddler (Sun Suit)
Select a fabric properly.
Check that the elastic should not be very tight.
Check the finishing of the strap and bib attached to the bloomer.
Check the design element of sun suit.
Fix suitable fasteners.
Dress for Kids (Frock)
Check the design element of frock.
Check the finishing in stitching lines.
Check the Proportionate and equally distributed gathers.
Stitch the Puffed Sleeve proportionately.

	Check the position of the placket and fasteners.
	Check the Overall finishing in hand work such as attachments of fasteners, hemming and neckline finishing.
	Make the collar with proper shape.
	Check the quality of the Turned up hem.
	Gent's Kurta and Pyjamas
	Make two-piece placket in Kurta.
	Finish the neckline with continuous facing.
	Make the Squared hem neatly.
	Finish the Inseam kurta pocket properly.
	Fold down the casing of pyjamas neatly.
	Finish the side pocket.
	Secure the end of pocket.
	Match seam at the intersecting points of the seamlines.
	Gent's Casual Shirt
	Check the shape of collar, cuff, pocket, and its finishing.
	Check the finishing of placket and placement of button and buttonholes.
	Check the yoke shape and pleat position below the yoke.
	Make the Sleeve placket and check the position of pleats.
	Check the overall finishing of shirt.
	Gent's Trousers
	Assure that Side pocket/Back hip pocket and fly placket ends should be secured properly.
	Sew the side seams without puckering.
	Make the loops, pleats and darts with proper placement.
	Check the alignment of both left and right side of Waist band.
	Check the finishing of side pocket and back hip pocket.
	Finish and hem the bottom properly.
	Check the fitting of the garment.
	Check the measurements and Quality of the garments and find the defects and stains if any.
	Correct the defects and remove the stains if any.
	Press and folding the garment using pressing tools and folding accessories.
	Solve the sewing machine problems with suitable remedies after finding the causes.
	Follow the safe measures and needle guard policy while doing the sewing and other operations.

7. TRADE SYLLABUS

SYLLABUS FOR SEWING TECHNOLOGY TRADE			
Duration – One Year			
Duration	Reference Learning Outcome	Professional Skills (Trade Practical) With Indicative Hours	Professional Knowledge (Trade Theory)
Professional Skill 210 Hrs. Professional Knowledge 42Hrs.	Make hand stitches in the given fabric following safety precautions.	1. Familiarization with the Institute. (30 hrs.)	Introduction <ul style="list-style-type: none"> • Trade • Job Prospects • Safety precautions • First Aid (06 hrs.)
		2. Familiarization & handling of tools. (15 hrs.) 3. Safety Precautions while handling the tools. (15 hrs.)	Basic Industrial Terminology Trade related Tools, their importance, usage and safety <ul style="list-style-type: none"> • Measuring Tools • Drafting Tools • Marking Tools • Cutting Tools • Sewing Tools • Finishing Tools (06 hrs.)
		4. Identification of fabrics and texture. (15 hrs.) 5. Handling of Fabrics. (20 hrs.) 6. Making weave samples. (25 hrs.)	Fabric Fundamentals <ul style="list-style-type: none"> • Brief idea about fibers • Types of Fabrics • Selection of Needle and thread according to fabric types • Broken Needle Policy Fabric Preparation for cutting <ul style="list-style-type: none"> • Fabric Grain • Selvedge • Shrinkage • Straightening the fabric Grains Measurements

			<ul style="list-style-type: none"> • Units • Measuring Techniques (06 hrs.)
		<p>Practice on Industrial Single needle lock stitch Sewing Machine</p> <p>7. Ergonomic principle of sitting on sewing machine. (8 hrs.)</p> <p>8. Speed Control. (10 hrs.)</p> <p>9. Practice on paper. (12 hrs.)</p> <p>10. Threading of machine. (10 hrs.)</p> <p>11. Bobbin winding & loading. (5 hrs.)</p> <p>12. Practice on fabric. (15 hrs.)</p>	<p>Basic Sewing Machine</p> <ul style="list-style-type: none"> • Parts and functions • Machine needle • Stitch formation • Sewing machine practice • Care and maintenance • Trouble-Shooting • Types of Industrial Sewing Machine (12 hrs.)
		<p>13. Running on (10 hrs.)</p> <ul style="list-style-type: none"> • Straight lines • Square • Zigzag lines • Circle • Semicircle • Spiral. <p>14. Practice on Over lock machine</p> <ul style="list-style-type: none"> • Threading • Running • Minor adjustments. (20 hrs.) 	<p>Over lock machine</p> <ul style="list-style-type: none"> • Parts and functions • Machine practice • Care and maintenance • Trouble Shooting Basic Garment Analysis (06 hrs.)
<p>Professional Skill 300 hrs.</p> <p>Professional Knowledge 60 hrs.</p>	<p>Stitch the following using the given fabric: Seams with seam finishes, Darts, Pleats, Tucks, Gathers & Shirrs, Frill, Hem, Casing, Edge Finishing, Neck lines, Placket,</p>	<p>15. Practice of making Seams (20 hrs.)</p> <ul style="list-style-type: none"> • Plain Seam (Straight & Curved) with seam finishes • Self-Enclosed seams • Top stitched seams • Corded Seam • Decorative seams <p>16. Practicing with Sewing Aids.</p>	<p>Seams</p> <ul style="list-style-type: none"> • Classification • Uses • Properties of Seams • Seam finishes Sewing Aids • Presser foots • Folders • Guides (06 hrs.)

	Pocket, Collar, Sleeves, Cuff.	(10 hrs)	
		17. Making Samples of <ul style="list-style-type: none"> • Darts • Pleats. (30 hrs.)	Introducing Fullness <ul style="list-style-type: none"> • Darts – Necessity, type & precautions during stitching • Pleats – Necessity, type & uses (06 hrs.)
		18. Making Samples of <ul style="list-style-type: none"> • Tucks • Gathers and Shirrs • Frills. (15hrs.)	Introducing Fullness <ul style="list-style-type: none"> • Tucks – Types & use • Gathering and Shirring • Flare • Ruffles/Frills – Types (Straight & Circular) & uses
		19. Practice of Hand stitches & Making Samples of them. (15hrs.)	Hand stitches <ul style="list-style-type: none"> • Hand needles – Size & types • Sewing Thread • Types & Applications of hand stitches (06 hrs.)
		20. Making samples of <ul style="list-style-type: none"> • Faced Hem • Edge stitched hem • Double stitched hem • Band hem • Ease in ahem • Mitered hem. (17 hrs.)	Hems <ul style="list-style-type: none"> • Types • Uses
21. Practice of the corner makings <ul style="list-style-type: none"> • Self-turned • With additional strip. (13 hrs.)	Corner Makings <ul style="list-style-type: none"> • Types • Uses (06 hrs.)		
22. Making samples of: <ul style="list-style-type: none"> • Casing with Drawstring 	Casing <ul style="list-style-type: none"> • Introduction 		

		<ul style="list-style-type: none"> • Casing with elastic • Casing with heading • Inside applied casing • Outside applied casing. <p>(25 hrs.)</p> <p>23. Making samples of edge finishing:</p> <ul style="list-style-type: none"> • Bias facing • Combination shaped facing • Outside facing • Self-facing • Shaped facing • Binding • Piping <p>(35 hrs.)</p>	<ul style="list-style-type: none"> • Use <p>Edge Finishing</p> <ul style="list-style-type: none"> • Facings • Bindings • Pippings <p>(06 hrs.)</p>
		<p>24. Making samples of different shaped necklines. (30 hrs.)</p>	<p>Necklines</p> <ul style="list-style-type: none"> • Different shapes of neckline
		<p>25. Making samples of Plackets: (30 hrs.)</p> <ul style="list-style-type: none"> • Faced Placket • Continuous Placket • One Piece Placket • Two Piece Placket • Two piece Placket with pleat • Zippered Placket <ul style="list-style-type: none"> ➤ Lapped ➤ Fly Front ➤ Open End ➤ Invisible ➤ Visible 	<p>Plackets</p> <ul style="list-style-type: none"> • Types • Sample makings <p>(06 hrs.)</p>
		<p>26. Making samples of different Pockets</p> <ul style="list-style-type: none"> • Patch • Inseam 	<p>Pockets</p> <ul style="list-style-type: none"> • Types • Design variations <p>(06 hrs.)</p>

		<ul style="list-style-type: none"> Cut/slash (30 hrs.) 	
		27. Samples of making Collars. (15hrs) 28. Samples of making Sleeves. (15hrs)	Collars <ul style="list-style-type: none"> Classification Collar terms Sleeves <ul style="list-style-type: none"> Classification Sleeve length variation Sample making of Sleeves with and without cuff. (06 hrs.)
Professional Skill 30Hrs; Professional Knowledge 06Hrs	Fix the fasteners on the given fabric.	29. Practice of fixing fasteners as Buttons, Hooks, Eyes, Press Studs. (18 hrs.) 30. Practice of making Button holes by Hand. (12 hrs.)	Trimmings <ul style="list-style-type: none"> Types Applications Fixing of Buttons, hooks etc. Making of Buttonhole (06 hrs.)
Professional Skill 30Hrs; Professional Knowledge 06Hrs	Mend the given fabric.	31. Practicing Darning and Patching. (30 hrs.)	Mending <ul style="list-style-type: none"> Darning Patching (06 hrs.)
Professional Skill 60Hrs; Professional Knowledge 12Hrs	Draft a pattern for Ladies' Suit and sew a Ladies' Suit with the help of the given pattern.	32. Stitching of Ladies suit. (60 hrs.)	Drafting & developing Pattern for Ladies suit. (12 hrs.)
Professional Skill 210 hrs.;; Professional Knowledge 42 Hrs	Sketch the following garments. <ul style="list-style-type: none"> Ladies' Tops/ Short kurties. Ladies' Suit. Nightwear (one piece/ two 	33. Practice of taking Body Measurements. (30 hrs.)	Human Figures <ul style="list-style-type: none"> Eight Head Theory Brief introduction about Joints and Muscles Types of Figures Body Measurements Importance Types & Measuring

	<p>piece).</p> <ul style="list-style-type: none"> • Sari Blouse. • Dresses for New Born. • Dresses for Toddlers. • Dresses for Kids. 		<p>Techniques</p> <ul style="list-style-type: none"> • Precautions • Measurement Charts (06 hrs.)
		<p>34. Practicing different types of layout using the given patterns. (30 hrs.)</p>	<p>Patterns</p> <ul style="list-style-type: none"> • Importance • Pattern Information • Types of Spreading & Pattern Layout • Importance • Spreading methods/machines • Types of layout Pattern Drafting • Drafting/Pattern Terminology • Principles of Pattern drafting (06 hrs.)
		<p>35. Pattern Making, Fabric Estimation, Cutting, Sewing, Pressing & Folding of Sari Petticoat. (90 hrs.)</p>	<p>Pressing</p> <ul style="list-style-type: none"> • Tools • Methods Importance of Pressing Trial Room • Necessity • Specification
		<p>36. Checking the Fitting of the garment. (30 hrs.)</p>	<p>Sketching and drafting of Sari Petticoat. (24 hrs.)</p>
		<p>37. Practice on special industrial sewing machines – (30 hrs.)</p> <ul style="list-style-type: none"> • Double Needle Machine • Button Hole Machine • Button Sewing Machine • Multipurpose Machine (Zigzag) • Bar Tack machine • Feed off the Arm Double Needle 	<p>Mass Production Process –</p> <ul style="list-style-type: none"> • Sequence of operations • Types of cutting machines • Fusing Technology • Types of Industrial Machines Used in sewing section • Finishing (06 hrs.)

Professional Skill 360Hrs; Professional Knowledge 72Hrs	Construct the following garments with fitting and quality according to the sketched designs. <ul style="list-style-type: none"> • Sari Petticoat. • Ladies' Top / Short kurties. • Ladies' Suit. • Nightwear (one piece with Yoke). • Nightwear (Two piece- Night Suit). • Dresses for New Born (Jhabla). • Dresses for Toddlers (Sun suit). • Dresses for Kids (Frock). • Gent's Kurta and Pyjamas. • Gent's Casual Shirt. • Gent's Trousers. 	Ladies Wear 38. Pattern Making, Fabric Estimation, Cutting, Sewing, Pressing & Folding of the following garments with design variations <ul style="list-style-type: none"> • Ladies Tops/Short kurties • Ladies suit • Night wear (one piece/two piece) • Sari blouses (60 hrs.) 39. Checking the Fitting of the garment. (30 hrs)	Sketching and drafting of the following garments- <ul style="list-style-type: none"> • Ladies Tops/Short kurties • Ladies suit • Night wear (one piece/two piece) • Sari blouses (18 hrs.)
		Kids Wear 40. Pattern Making, Fabric Estimation, Cutting, Sewing, Pressing & Folding of the following garments with design variations <ul style="list-style-type: none"> • Dresses for newborn • Dresses for Toddler • Dresses for Kids. (85 hrs.) 41. Checking the Fitting of the garment. (35 hrs.).	Sketching and drafting of the following garments- <ul style="list-style-type: none"> • Dresses for newborn • Dresses for Toddler • Dresses for Kids (24 hrs.)
		Gents Wear 42. Pattern Making, Fabric Estimation, Cutting, Sewing, Pressing & Folding of the following garments with design variations <ul style="list-style-type: none"> • Kurta & Pyazama • Casual Shirts &Trousers (90 hrs.)	Pattern Making, Fabric Estimation, Cutting, Sewing, Pressing & Folding of the following garments with design variations <ul style="list-style-type: none"> • Kurta & Pyazama • Casual Shirts &Trousers (24 hrs.)

		43. Checking the Fitting of the garment. (30 hrs.)	
		44. Methods of removing different kinds of stains in fabrics. (18 hrs.) 45. Checking of garments in respects of –(12 hrs.) <ul style="list-style-type: none"> • Measurements • Stitching • Stains • Defects • Correcting measures. 	<p>Laundry Stains</p> <ul style="list-style-type: none"> • Classification • Removing techniques <p>Quality Control</p> <ul style="list-style-type: none"> • Definition, need & planning • Types of Inspection • Stages of Inspection • Role of Quality Controller (06 hrs.)
<p>PROJECT</p> <p>Choose any four garments mentioned above with specification sheet, Pattern & neatly finished garments and present the same.</p>			

SYLLABUS FOR CORE SKILLS

1. Employability Skills (Common for all CTS trades) (160Hrs.)

Learning outcomes, assessment criteria, syllabus and Tool List of Core Skills subjects which is common for a group of trades, provided separately In www.bharatskills.gov.in.

List of Tools & Equipment			
SEWING TECHNOLOGY (for Batch of 20 Candidates)			
S No.	Name of the Tools and Equipment	Specification	Quantity
A. TRAINEES TOOL KIT			
1.	Measuring Tape	150 cm	20+1 Nos.
2.	Seam Ripper		20+1 Nos.
3.	Thimble		20+1 Nos.
4.	Tailor's Card Scale Triangular		20+1 Nos.
5.	Tailors Square	Plastic	20+1 Nos.
6.	French Curve	Set of three	20+1 Nos.
7.	Thread Cutter	24"	20+1 Nos.
8.	Scale plastic		20+1 Nos.
B. DRAFTING/CUTTING /SEWING ROOM TOOLS & EQUIPMENT			
9.	Scissors	25 cm	21 Nos.
10.	Pinking Shears		05 Nos.
11.	Leg Shaper	Plastic	21 Nos.
12.	Garment Hangers		21 Nos.
13.	Screw Driver Set		04 sets
14.	Table Sharpener		04 Nos.
15.	Pressing Table		05 Nos.
16.	Blanket for padding of Pressing Table		05 Nos.
17.	Rubber mat	Size as per requirement	05 Nos.
18.	Sprayer		05 Nos.
19.	Waste Bin Big / Small		10 Nos.
20.	Pattern Punch		05 Nos.
21.	Pattern Notcher		05 Nos.
22.	Pattern Hanging Stand		04 Nos.

23.	Water Tub	60 cm dia	01 No.
24.	Stand for hanging dresses		05 Nos.
25.	Trial room with arrangements of hanging Dresses	3 side mirrors of size 150 cm x 60 cm each	01No.
26.	Electric Automatic steam press		05 Nos.
27.	Sewing Machine -	Single Needle Lock stitch Industrial model	20 Nos.
28.	Over Lock Machine 3 Thread		01 No.
29.	Zigzag Multi Purpose Machine		01 No.
30.	Double Needle Machine		01 No.
31.	Button Hole machine		01 No.
32.	Button Sewing Machine		01 No.
33.	Bar Tack Machine		01 No.
34.	Feed off the arm Double Needle		01 No.
35.	Machine attachments		As required
36.	Stools		20 Nos.
37.	Drafting Table		10 Nos.
38.	Display Board Covered with glass or Acrylic Sheet	120 x 90 cm	02Nos.
39.	Instructor Table		01No.
40.	Instructor Chair		02Nos.
41.	Steel Almirah	195x 90 x 60 cm	02Nos.
42.	Pigeon hole Almirah	10 lockers with separate locking arrangements for trainees	02Nos.
43.	Locks for above pigeon hole		20 Nos.
44.	Wall Clock		03Nos.
45.	Calculator Desk Type		01No.
46.	White Board with accessories	Size as per requirement	02Nos.
47.	Dummy Lady, Men, Kid	Different sizes	02 each

C. THEORY ROOM

48.	Single desks for trainees with arrangements of keeping Books etc.		20 Nos.
49.	Chairs		20 Nos.
50.	Faculty Table & Chair set		01No.
51.	Computer	CPU: 32/64 Bit i3/i5/i7 or latest processor, Speed: 3 GHz or Higher. RAM:- 4 GB DDR-III or Higher, Wi-Fi Enabled. Network Card: Integrated Gigabit Ethernet, with USB Mouse, USB Keyboard and Monitor (Min. 17 Inch.) Licensed Operating System and Antivirus compatible with trade related software	01No.
52.	UPS		As required
53.	Multimedia Projector		As required
54.	White Magnetic Board with Felt board & accessories		01No.
55.	Display Board		02Nos.
56.	Storage Almirah		01No.
57.	Book Shelf		01No.
58.	A/C unit split type	2 T capacity with Stabilizer	As required

Note: -

1. All the tools and equipment are to be procured as per BIS specification.
2. Internet facility is desired to be provided in the class room.
3. Trainees Tool kit may be treated as consumables in respect of trainees actually completing the course of one year.

The DGT sincerely acknowledges contributions of the Industries, State Directorates, Trade Experts, Domain Experts, trainers of ITIs, NSTIs, faculties from universities and all others who contributed in revising the curriculum.

Special acknowledgement is extended by DGT to the following expert members who had contributed immensely in this curriculum.

List of Expert Members participated/ contributed for finalizing the course curriculum of Sewing Technology trade			
S No.	Name & Designation Sh./Mr./Ms.	Organization	Remarks
1.	S. Venkatesh, Head HR & Admin	Raymond	Member
2.	Sanjeev Mohanty Managing Director	Bennetton India Pvt. Ltd., Gurgaon	Member
3.	Animesh Saxena	Udyog Vihar Industries Association, Gurgaon B-40, Phase 5, Udyog Vihar Gurgaon-122017	Member
4.	Dr. Darlie Koshy Director General and CEO	IAM & ATDC Apparel Export Promotion Council Gurgaon	Chairman
5.	Arindam Das	National Institute of Fashion Technology, New Delhi	Member
6.	Dr. Kushal Sen Professor	D/o Textile Technology IIT Delhi	Member
7.	Bhattacharya. G HOD Textiles Department	Institute for Textile Technology, CHOUWAR	Member
8.	Poonam Thakur Professor & Academic Head	NIIFT, Mohali	Member
9.	L.N. Meena, Lecturer	Arya Bhatt Polytechnic, Delhi	Member
10.	Prabhas Kashyap , General Manager- Planning & Production Co-ordination	Gokaldas Export Ltd., Bangalore	Member
11.	Bishwanath Ganguly	Madura Fashion & Retail, Aditya Birla Centre for Retail Excellence (A B C R E)	Member

12.	K.N. Chatterjee, HOD Fashion and Apparel Engineering	THE TECHNOLOGICAL INST. OF TEXTILE & SCIENCES, Bhiwani, Haryana, INDIA-127021.	Member
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15.	Navjot Walia, Vice President	Maral Overseas Ltd., Noida	Member
16.	Rajeev Mehani, Vice President	Vardhaman Textiles	Member
Mentor			
17.	R.P. Dhingra, Director (P)	DGE&T	Mentor
Core Group			
18.	Haradhan Das, TO	CSTARI, Kolkata	Member
19.	Subhankar Bhowmik, DPA Gr. B	NIMI, Chennai	NIMI Representative
20.	Rajendra Kumar, JDT(WT)	DGE&T	Member
21.	D. Shanthi, ADT	RVTI, Trivendrum	Member
22.	Abha Rastogi, TO	RVTI, Panipat	Member
23.	Chitra, TO	RVTI, Panipat	Member
24.	Rinku Soni, TO	RVTI, Jaipur	Member
25.	Babita, TO	NVTI, Noida	Member
26.	Bhagyashree, TO	RVTI, Indore	Member
27.	L. R. Ramesh Babu, TO	RVTI, Trivendrum	Member
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29.	Bhavin Kumar M. Solanki	ITI, Jambughoda, Gujarat	Member
30.	Divya, TO	RVTI, Bangalore	Member

ABBREVIATIONS

CTS	Craftsmen Training Scheme
ATS	Apprenticeship Training Scheme
CITS	Craft Instructor Training Scheme
DGT	Directorate General of Training
MSDE	Ministry of Skill Development and Entrepreneurship
NTC	National Trade Certificate
NAC	National Apprenticeship Certificate
NCIC	National Craft Instructor Certificate
LD	Locomotor Disability
CP	Cerebral Palsy
MD	Multiple Disabilities
LV	Low Vision
HH	Hard of Hearing
ID	Intellectual Disabilities
LC	Leprosy Cured
SLD	Specific Learning Disabilities
DW	Dwarfism
MI	Mental Illness
AA	Acid Attack
PwD	Person with disabilities

