

Syllabus for the trade  
of

# **EMBROIDERY AND NEEDLE WORK**

(SEMESTER PATTERN)

UNDER  
CRAFTSMEN TRAINING SCHEME

Designed in 2013

By  
Government of India  
CENTRAL STAFF TRAINING AND RESEARCH INSTITUTE  
Directorate General of Employment and Training  
Ministry of Labour & Employment  
EN - 81, SECTOR – V, SALT LAKE CITY,  
Kolkata – 700 091.

List of Members of Trade Committee meeting for the trade of “Embroidery & Needle Work” held at NVTI, Noida, Dated 15/12/2011

<b>Sl. No.</b>	<b>NAME &amp; DESIGNATION S/SHRI</b>	<b>REPRESENTING ORGANIZATION</b>	<b>REMARKS</b>
1.	Ms. Upma Bhatia, Jt. Dir. of Training	Principal N V T I , Noida	Chairman
2.	Mr. Rajender Kumar, Jt. Dir. of Training	DGE&T, Shram Shakti Bhawan, New Delhi	Member
3.	Mr. Lalit Mohan Dixit	Proprietor “Infinity” Sector – 10, Noida	Member
4.	Mr. Gabriel Scarvelli	Proprietor “TCQ” Karol Bagh, New Delhi	Member
5.	Mr. Sunny Soni	Proprietor “Artworld Punching”Kailash Colony New Delhi	Member
6.	Mr. Sunil Sharma	Freelance Designer New Delhi	Member
7.	Ms. Pallavi Yadav	Textile Designer Sewa Polytechnic, New Delhi	Member
8.	Ms. Priya, Instructor	(Fashion Desiging) Sewa Polytechnic, New Delhi	Member
9.	Mr. M.D. Azam	Embroidery Incharge B L International	Member
10.	Mr. Ravi Goswami, Manager	(Technical &Sales) Magnum Resources	Member
11.	Mr. Dhirender Kumar Dixit	Proprietor“Dixit International”	Member
12.	Ms. Babita , Training Officer,	NVTI Noida	Member
13.	Ms. Chitra, Training Officer	RVTI, Panipat	Member
14.	Ms. Kavita, Vocational Instructor,	RVTI, Panipat	Member

**List of members attended the Workshop to finalize the syllabi of existing CTS into Semester Pattern held from 6<sup>th</sup> to 10<sup>th</sup> May'2013 at CSTARI, Kolkata.**

<b>Sl. No.</b>	<b>Name &amp; Designation</b>	<b>Organisation</b>	<b>Remarks</b>
1.	R.N. Bandyopadhyaya, Director	CSTARI, Kolkata-91	Chairman
2.	K. L. Kuli, Joint Director of Training	CSTARI, Kolkata-91	Member
3.	K. Srinivasa Rao, Joint Director of Training	CSTARI, Kolkata-91	Member
4.	L.K. Mukherjee, Deputy Director of Training	CSTARI, Kolkata-91	Member
5.	Ashoke Rarhi, Deputy Director of Training	ATI-EPI, Dehradun	Member
6.	N. Nath, Assistant Director of Training	CSTARI, Kolkata-91	Member
7.	S. Srinivasu, Assistant Director of Training	ATI-EPI, Hyderabad-13	Member
8.	Sharanappa, Assistant Director of Training	ATI-EPI, Hyderabad-13	Member
9.	Ramakrishne Gowda, Assistant Director of Training	FTI, Bangalore	Member
10.	Goutam Das Modak, Assistant Director of Trg./Principal	RVTI, Kolkata-91	Member
11.	Venketesh. Ch. , Principal	Govt. ITI, Dollygunj, Andaman & Nicobar Island	Member
12.	A.K. Ghate, Training Officer	ATI, Mumbai	Member
13.	V.B. Zumbre, Training Officer	ATI, Mumbai	Member
14.	P.M. Radhakrishna pillai, Training Officer	CTI, Chennai-32	Member
15.	A.Jayaraman, Training officer	CTI Chennai-32,	Member
16.	S. Bandyopadhyay, Training Officer	ATI, Kanpur	Member
17.	Suriya Kumari .K , Training Officer	RVTI, Kolkata-91	Member
18.	R.K. Bhattacharyya, Training Officer	RVTI, Trivandrum	Member
19.	Vijay Kumar, Training Officer	ATI, Ludhiana	Member
20.	Anil Kumar, Training Officer	ATI, Ludhiana	Member
21.	Sunil M.K. Training Officer	ATI, Kolkata	Member
22.	Devender, Training Officer	ATI, Kolkata	Member
23.	R. N. Manna, Training Officer	CSTARI, Kolkata-91	Member
24.	Mrs. S. Das, Training Officer	CSTARI, Kolkata-91	Member
25.	Jyoti Balwani, Training Officer	RVTI, Kolkata-91	Member
26.	Pragna H. Ravat, Training Officer	RVTI, Kolkata-91	Member
27.	Sarbojit Neogi, Vocational Instructor	RVTI, Kolkata-91	Member
28.	Nilotpall Saha, Vocational Instructor	I.T.I., Berhampore, Murshidabad, (W.B.)	Member
29.	Vijay Kumar, Data Entry Operator	RVTI, Kolkata-91	Member

## **GENERAL INFORMATION**

1. **Name of the Trade** :- Embroidery & Needle Work
  
2. **NCO Code No.**
  
3. **Duration** :- One Year (Two Semesters)
  
4. **Power Norms** :- 3.7 KW
  
5. **Space Norm** :- 56 sq. Meters
  
6. **Entry Qualification** :- Passed 8 th class examination
  
7. **Unit Size(No of Students)** :- 16 Trainees
  
8. **Qualification for Instructor** :- (i) NTC/NAC Embroidery and Needle  
Work trade with three years Experience  
**.OR**  
(ii) Diploma in Fashion Technology/Costume Design and  
Dress Making with two years Experience.  
**OR**  
(iii) Degree in Fashion Technology/ Costume Design and  
Dress Making with one year Experience.
  
9. **Desirable Qualification** :- Preference will be given to a candidate with CTC in  
Embroidery and Needle

Note: At least one Instructor must have Degree/Diploma in Relevant Field

## SYLLABUS FOR THE TRADE OF EMBROIDERY & NEEDLE WORK UNDER C.T.S

**DURATION: Six Months**

**First Semester**

**Semster Code :ENW: SEM I**

Week No.	Trade Practical	Trade Theory
01	<p><b>Drawing &amp; Creation</b></p> <ol style="list-style-type: none"> <li>1. Colour Wheet</li> <li>2. Types of Colour                             <ol style="list-style-type: none"> <li>a) Primary Colour</li> <li>b) Secondary Colour</li> <li>c) Tertiary Colour</li> <li>d) Quarternary Colour</li> <li>e) Intermediate Colour</li> <li>f) Achromatic/Netral Colour</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. Colour Wheel</li> <li>2. Definition &amp; Types of Colour</li> <li>3. Drawing Tools &amp; Equipments.</li> </ol> <p><b>Knowledge of General Safety, Occupational health and hygiene.</b></p>
02-03	<p><b>Colour Schemes</b></p> <ol style="list-style-type: none"> <li>a) Achromatic – Mono, Bio, Triad</li> <li>b) Chromatic – Monochrome, Monochromatic, Contrast, Complimentary, Split Complimentary, Analogous, Cools, Warm, Releated.</li> </ol>	Colour Schemes
04-05	<p><b>Placement of Design</b> – Half Drop, Full Drop, Brick, Oogee, Balance, Rythem, Harmony, Proportion.</p>	<p>Place of Design.</p> <p>Types of Basic Stitches &amp; their uses.</p>
06-07	<p><b>Flat Stitches</b></p> <ol style="list-style-type: none"> <li>1. Running Stitch</li> <li>2. Back Stitch</li> <li>3. Stem Stitch</li> <li>4. Herring Bone Stitch</li> <li>5. Fishbone Stitch</li> <li>6. Satin Stitch</li> <li>7. Kashmiri Stitch/Kashmiri Knot Stitch</li> <li>8. Spider Stitch</li> </ol>	<ol style="list-style-type: none"> <li>1. Tracing Tools &amp; Equipments</li> <li>2. Techniques of Running, Back, Stem Stitch &amp; their uses.</li> <li>3. Tracing Methods</li> <li>4. Techniques, Stain Stitch &amp; their uses.</li> <li>5. Techniques of Kashmiri Stitch &amp; Spider Stitch &amp; their uses.</li> </ol>
08	<p><b>Looped Stitch</b></p> <ol style="list-style-type: none"> <li>1. Chain Stitch</li> <li>2. Feather Stitch</li> </ol>	<p>Techniques of Chain, Feather &amp; Lazy Dazy Stitch their uses.</p>

	<ol style="list-style-type: none"> <li>3. Lazy- Dazy Stitch</li> <li>4. Button Hole Stitch</li> <li>5. Variation of Button Hole Stitch</li> <li>6. Blanket Stitch</li> </ol>	
09	<b>Knotted Stitches</b> <ol style="list-style-type: none"> <li>1. French Knot Stitch</li> <li>2. Bullion Stitch</li> <li>3. Sippi Stitch</li> </ol>	Techniques of Button Hole, Blanket Stitch & their uses.
10	<b>Fancy Net ( Hand work )</b> <ol style="list-style-type: none"> <li>1. Cane Weaving Stitch <ol style="list-style-type: none"> <li>(a) Single Cane Wearing</li> <li>(b) Double Cane Wearing</li> </ol> </li> <li>2. Button Hole Net</li> </ol>	Techniques of French knot, Bullion, Sippi Stitch their uses.
11	<b>Couching Stitch (Hand work)</b> <ol style="list-style-type: none"> <li>1. Straight Couching</li> <li>2. Zig zag Couching</li> <li>3. Lopped Couching</li> <li>4. Circular Couching</li> </ol>	Definition, Types & characteristics.
12	<b>Shade Work (Hand work)</b> <ol style="list-style-type: none"> <li>1. Running Shade</li> <li>2. Long &amp; Short Shade</li> <li>3. Button Hole Shade</li> </ol>	Definition, Types & characteristics.
13	Practical of Long & Short Shade work in different flowers & leafs	
14	<b>Scallops Making in Hand Emb.</b> <ol style="list-style-type: none"> <li>a) Button Hole Scallops</li> <li>b) Satin Scallops</li> </ol>	Different kind of Decorative Edges in Hand Embroidery.
15-16	<b>Smocking (Hand work)</b> <ol style="list-style-type: none"> <li>1. China Smocking <ol style="list-style-type: none"> <li>a) Flower Smocking</li> <li>b) Wave Style</li> <li>c) Pineapple Style</li> <li>d) Mat Style</li> </ol> </li> <li>2. English Smocking</li> </ol>	Definition, Types & characteristics.
17-18	<b>Zig Zag Machine Embroidery</b> <ol style="list-style-type: none"> <li>a) Practice of Operation Machine</li> <li>b) Speed Control</li> <li>c) Threading of Machine</li> <li>d) Cleaning &amp; Oiling of Machine</li> <li>e) Practice of Moving the Frame</li> </ol>	Handling & Preparation of Machine Embroidery  Used of Tools & Equipment in Machine Embroidery

19	Practice of Running Stitch	Part of Automatic Zig Zag Machine & its Control
20	Rolled Hem	Merits, Demerits & characteristics of Automatic Zig Zag Machine.
21	Practice of Zig Zag Stitch	Enlargement & Reduction of Design.
22-24	<p><b>Computerized Embroidery Machine</b></p> <p>Practice of operation the machine</p> <p>Threading of machine.</p> <p>Use the frame in different types of materials.</p>	<p><b>Computerized Embroidery Machine</b></p> <p>Different types of single head single needle computerized embroidery machine available in the market and their function.</p> <p>Part of single head single needle computerized embroidery machine &amp; their control.</p>
25	Project work / Industrial visit (optional)	
26	EXAMINATION	

## SYLLABUS FOR THE TRADE OF EMBROIDERY & NEEDLE WORK UNDER C.T.S

**DURATION: Six Months**

**Second Semester**

**Semester Code :ENW: SEM II**

Week No.	Practical	Theory
01-02	<b>Drawing &amp; colouring</b> <b>Elements of Design</b> a) Space – Positive, Negative b) Line – Types of line c) Form – Types of form Natural, Man made, Abstract d) Colour Scheme e) Texture	Elements of Design
03-04	<b>Design</b> a) Kind of Design b) Sources of Design	Types of Design.
05	<b>Combination of Design</b>	Sources of Design
06-07	<b>Applique Work ( Hand work )</b> i. Simple Applique ii. Cut Applique iii. Felt Applique iv. Embroidered Applique v. Net Applique vi. Shadow Applique	Definition, Types & characteristics.
08-09	<b>Cut Work ( Hand Work )</b> a) Eyelet b) Open Cut Work c) Hardanger Cut Work	Definition, Types & characteristics.
10	<b>Quilting ( Hand Work )</b> a) English Quilting b) Italian Quilting c) Shadow Quilting	Definition, Types & characteristics.
11	Assisi Work & Cross Stitch ( Hand work )	Techniques of Assisi work, Cross Stitch & their uses.
12	Drawn & Pulled Thread work	Related Theory
13	<b>Fancy Work ( Hand work )</b>	Related Theory



	a) Practice of sequences in Simple Line b) Overlapping Line c) Use of Beads & other accessories	
14	<b>Beading ( Hand work )</b>  a) Single Beading b) Double Beading c) Zig Zag Beading	Related theory
15	<b>Zig Zag Machine Embroidery</b> Practice of Round Leafs in Different Design	Mechanical Faults of Automatic Machine & Their Remedies
16	Practice of Dotted Stitch	Pressing Tools & Equipments
17	Practice of Pointed Leafs in Different Design	Types of threads Used in Machine Embroidery
18	Applique work in Machine Embroidery & Its variation	Classification of Fibers
19	Practice of Dori Work in Machine Embroidery	Relation Between Thread, Machine needle and Cloth.
20	Mirror Work Through Machine Embroidery	Care & Maintenance of Embroidery Machine
21	Practice Cut Work Through Machine Embroidery	Production Control
22	Round Stitch in Machine Embroidery	Quality Control
23-24	<b>Computerized Embroidery Machine</b>  Practice & Used tools for single head and Sle needle.  Use the preloaded design in different articles.  Change the prefixed colour scheme in the Articles.	<b>Computerized Embroidery Machine</b>  Knowledge trade related software available in the market.  Types of stitches used in single head & single needle computerized embroidery machine.
25	Revision	
26	Final Trade Test	
<p><b>Note:-</b></p> <ol style="list-style-type: none"> <li>1. Visit to the related Industry, Craft Museum, Fair whenever available.</li> <li>2. A Catalogue of Embroidery Stitches shall be made by each trainee.</li> <li>3. Application of above mentioned embroidery stitches will be on any six articles.</li> </ol> <p><b>List of Article:-</b></p> <ol style="list-style-type: none"> <li>a) Ladies Handkerchief</li> </ol>		

- b) Gents Handkerchief
- c) Cushion Cover
- d) Pillow Cover
- e) Baby Frock/Skirt
- f) Baby Sheet
- g) Ladies Blouse
- h) Ladies Suit
- i) Saree

**Remarks:-** The time period of Social Studies will be given to New Subject "Employability Skills."

**TRADE: Embroidery & Needle Work**  
**LIST OF TOOLS & EQUIPMENT**

**A. TRAINEES TOOL KIT FOR 16 TRAINEES + one**

<b>S.No.</b>	<b>Description</b>	<b>Qty.</b>
1.	Scissors Big	17 Nos.
2.	Calculator	01 No.
3.	Wall Clock (One for practical lab & one for theory room)	02 Nos.
4.	Cellotape Dispenser	01 No.
5.	Screw Driver Set	02No.
6.	Plyer	02 No.
7.	Belt Cutter	02 No.
8.	Thread Cutter	17 Nos.
9.	Stitch Opener	17 Nos.
10.	Embroidery Frame/Ring (4" – 5")	17 Nos.
11.	Embroidery Frame/Ring (7" – 8")	17 Nos.
12.	Measuring Tape	17 Nos.
13.	Stapler	02 No.
14.	Door Mats (One for practical lab & one for theory room)	02 Nos.
15.	Rubber Mat	02 No.
16.	Blanket	02 No.
17.	Cotton Sheet/Plain Cotton Fabric	01 No.
18.	Water Spray Bottle	02 No.
19.	Pinking Scissor	05 Nos.
20.	Geometric Box	17 Nos.
21.	Pointed Pencil	17 Nos.
22.	Eraser	17Nos.
23.	Drawing Sketch Book	17 Nos.
24.	Water Colour Box	17 Nos.
25.	Drawing Brush (0/1/2 no.)	17 Nos. Each
26.	Stencil	05 Nos.
27.	Colour Palette	17 Nos.

**Remark: S. No. 08-12, 14-15, 18, 20-27 treated as consumable items**

## EMBROIDERY AND NEEDLE WORK

### A. Machinery & Equipments

S.No.	Description	Qty.
1.	Single Head upto 14 Needle Computerized Embroidery + Stitching Machine	01 No.
2.	Automatic Electric Press	01 No.
3.	Air Conditioner Unit split 2 Ton capacity with Stabilizer	03 Nos.
4.	Blower	As per required
5.	Treadle (Foot) Machines	16 Nos
6.	Zig-Zag Embroidery Machines (with Motor)	2 Nos

### B. Furniture (for theory Room and Practical Lab)

S.No.	Description	Qty.
1.	Instructor Table ( One for practical lab & one for theory room )	02 Nos.
2.	Instructor Chair ( Two for practical lab & one for theory room )	03 Nos.
3.	Almirah	02 Nos.
4.	Low Seated Chair	17 Nos.
5.	Trainees Locker (8 Cabinet )	02 Nos.
6.	Cutting Table/Tracing Table	01 No.
7.	White Magnetic Board ( One for practical lab & one for theory room )	02 Nos.
8.	Display Board	03 Nos.
9.	Interactive Board complete with Latest Computer ( One for practical lab & one for theory room )	02 Nos.
10.	Tables ( for theory cum drawing lab )	17 Nos.
11.	Stable Chair ( for zig zag machine and theory cum drawing lab )	20 Nos.
12.	Pressing Table	01 No.
13.	Curtains	As per required
14.	Carpet ( for hand embroidery )	As per required

C.