1. Course title : DRAFTING & PATTERN MAKING (PRACTICAL)

**2. Course code** : GT/FT-301

**3. Semester** : 3<sup>rd</sup>

**4. Rationale of the course:** To work efficiently, to communicate effectively in the workroom and to minimize errors due to misunderstanding, this course helps to understand, identify, and recognize functions of pattern making tools as well as definitions of terms, symbols used in industry. It will also provide the knowledge or technique of converting two dimensional paper pattern to a three dimensional ready garments.

### **5. Course Outcome:**

- Elaborately describe about pattern making tools and its importance.
- Analyze pattern making terminologies.
- Explain fabric terminologies.
- To understand pattern grain line and symbols.
- To understand necessity of darts.
- Knowledge about vertical measurements and horizontal measurements.
- Describe about balance line terms.
- Give brief knowledge of standard chart and personal chart.
- To analyze apparel product development sheets.

### **6.**Teaching scheme (in hours)

Lecture	Tutorial	Practical	Total
12	-	80	92

#### 7. Examination Scheme

	Theory			Practical					
Examination Full Marks	Sessional Full Marks	Total Marks	Pass Marks	Practical	Practical Assessment	Total Marks	Pass Marks		
_	ı	-	-	100	100	200	66		

Chapter	Chapter Title	Content	Ho
No Unit-I	Orientation to Pattern Making	<ul> <li>Pattern Making</li> <li>Principles &amp; Methods,</li> <li>Flat Pattern Making techniques,</li> <li>Various terminologies used,</li> <li>Sloper,</li> <li>Working Pattern,</li> <li>Master Pattern,</li> <li>Production Pattern,</li> <li>Master Pattern Set,</li> </ul>	15 + 3L

		<ul> <li>Fabric grainlines.</li> <li>Various tools used and their importance and identification along with purpose of use.</li> <li>Measuring tools,</li> <li>Cutting tools,</li> <li>Sewing tools and equipment's,</li> <li>Pressing tools and equipment's,</li> <li>Pattern Paper,</li> <li>Importance of Notch tool, Awl, Punch &amp; Circle.</li> <li>Define Grain and its types.</li> <li>Briefly describe Selvage.</li> <li>Meaning of Bias and True bias.</li> <li>Identify the meaning of Bowling and skewing</li> <li>Pattern Information and its importance (Pattern grain line &amp; information)</li> <li>Seam allowances and their importance</li> <li>Production ready patterns.</li> </ul>	
Unit-II	Measurements	<ul> <li>Methods of measuring body and dress forms.</li> <li>Relationship of sizes and measurements.</li> <li>How to take measurements of basic bodice, sleeves, collars and shirts.</li> </ul>	15 + 2L
Unit-III	Darts and Dart manipulation,	<ul> <li>Darts, their types, their purpose, Single dart series- Dart Manipulation on Upper Bodice – Slash &amp; Spread technique, Pivot technique.</li> <li>Dart Equivalents – construction methods</li> </ul>	25 + 3L
Unit-IV	Development of Patterns	<ul> <li>Basic bodice</li> <li>Basic Tailored Skirt</li> <li>Basic Sleeves</li> <li>Sleeve variations <ul> <li>Cap Sleeves, Bishop Sleeves</li> <li>Leg of mutton sleeve, puff sleeve</li> </ul> </li> <li>Basic skirts</li> <li>A-line skirt</li> <li>Flared skirt</li> <li>Panel skirt</li> <li>Circular skirt</li> <li>Skirt Waist bands</li> <li>Collar variations</li> <li>Shirt collar</li> <li>Peter pan collar</li> <li>Sailor collar and</li> <li>Mandarin Collar</li> <li>Basic Torso foundation</li> </ul> <li>Dress variations: Tailored dress, Off Shoulder dress, One off Shoulder dress, Spaghetti Dress</li> <li>Tent foundation</li>	25 + 4L

**9. Suggested implementation Strategies:** The syllabus can be completed by regular classes, special classes using audio- visual audio aids, tutorial classes and providing writing materials. Practical classes in the laboratory help students to understand the subject.

## 10. Suggested learning resource:

- i) The Technology of Clothing Manufacture By Carr & Latham
- ii) Zarapkar, Couture sewing techniques
- iii) Pattern making for fit and fashion by Helen Armstrong
- iv) Pattern making by Winifred Aldrich
- v) Dress Pattern Designing Natalie Bray

1. Course title : HISTORY OF TEXTILES & FASHION

**2. Course code** : GT/FT-302

3. Semester : 3<sup>rd</sup>

**4. Rationale of the course:** This course has been designed to give deep insights on the history of Textiles & Fashion right from the pre-historic period upto its present day - contemporary styles in clothing; highlighting the manner in which clothing and fashion have evolved over the ages. It also includes a detailed study of the Traditional Textiles of India.

**5. Course Outcome:** After completion of this course the students will be able to-

**CO1:** Understand the origin and evolution of fashion and clothing through the different ages of World history

**CO2:** Have a complete overview of the Traditional textiles of different regions of India, with special reference to North east India; as well as understand the rich and vibrant cultural heritage of hand-woven's, dyed, printed as well as ornamented textiles that our country possesses.

**CO3:** Realize how present day clothing has evolved over the years, which is more practical and functional in terms of daily use, as well as the introduction of diffusion lines and fast fashion to meet the ever changing demands of the consumer

### 6. Teaching scheme (in hours)

	Lecture	Tutorial	Practical	Total
450	(including 2 class test)	-	-	45

### 7. Examination Scheme:

The	eory	Prac		
Semester End Examination	Sessional		Sessional	Pass/Total Marks
Full Marks	Full Marks	Full Marks	Full Marks	
70	30	-	-	33/100

Chapter No	Chapter Title	Content	Hrs
Unit-I	An Introduction to Textiles and Clothing	<ul> <li>History of Clothing &amp; Textile, Importance, Pre-historic Textiles &amp; Clothing, Initial manufacture of clothing and how it has evolved over the ages</li> <li>Clothing, Contemporary Clothing, Factors affecting Clothing</li> </ul>	2

Unit-II	Influence of various Civilizations on Textiles	<ul> <li>Textiles of Ancient Near East: Mesopotamia, Sumerian, Babylonian, Assyrian</li> <li>Textiles of Ancient Egypt, Greece &amp; Rome</li> <li>French Textiles, Linen, French Renaissance, Motifs in use, Baroque &amp; Rococo styles</li> <li>Textiles of England, English Chintz and Linen, Motifs,</li> </ul>	10				
		<ul><li>Tapestries</li><li>Industrial Revolution &amp; its impact on Textiles &amp; Clothing</li></ul>					
		• Byzantine					
		• Turkish Textiles, Motifs and Embroidery					
		• Persian Textiles					
		Oriental Rugs and Carpets, motifs, significance					
		Chinese Textiles – Silk – Motifs & designs – Animal motifs and their significance					
		• Japanese Textiles – Exploration of Silk – Plangi work					
		• Indonesian Textiles – Batik – Ship of the dead					
		• African Textiles					
Unit-III	The Basics of Fashion	<ul> <li>Understanding Fashion - Definition and Overview</li> <li>Difference between Fashion &amp; Clothing</li> <li>History of Fashion Design, its evolution, The Golden Age of French Fashion, A brief History of Fashion Trends, Influence of Fashion trends on Women's wear, Roaring twenties and the Role played by Women Fashion Designers</li> <li>Impact of Industrial Revolution on Fashion</li> <li>Influence of French Revolution on Civilian Clothing</li> <li>Impact of World Wars on Fashion</li> <li>Different Art Movements which have influenced the different period of fashion</li> <li>Meaning of the terms Haute Couture, Pret-a-porter, Avant garde, Mass produced Ready-to-wear Fashion, Off-shore Manufacturing</li> <li>Evolution of Menswear, Categories in Menswear Clothing, Colours and Fabrics popularly used</li> <li>An Introduction to Fashion capitals of the World - Paris, Milan, London, New York, Los Angeles, Tokyo, Emergence of India as a Fashion Capital</li> </ul>	12				

Unit-IV	Textiles of India – Evolution of Fashion through the years	<ul> <li>Evolution of Modern Indian Fashion 1910 - to present</li> <li>Role of Films in the Indian Fashion Industry</li> </ul>	3
Unit-V	Traditional Textiles of India – Motifs & Handwoven	<ul> <li>Motifs of India - styles &amp; Colour combinations used: Animal motifs, Floral &amp; Fruit Motifs, other motifs inspired from Nature, their significance.</li> <li>Geometric motifs</li> <li>An introduction to Hand-woven Fabrics of India: <ul> <li>Daccai Muslin</li> <li>Chanderi</li> <li>Patola</li> <li>Paithani</li> <li>Himrus</li> <li>Amrus</li> <li>Baluchari Butidar</li> <li>Pochampally</li> <li>Banarsi Brocades</li> <li>Kinkhabs</li> <li>Kanjeevaram</li> <li>Kashmiri shawls &amp; Carpets</li> <li>Textiles of the North-east</li> <li>Assam</li> <li>Meghalaya</li> <li>Manipur</li> <li>Nagaland</li> <li>Arunachal Pradesh</li> </ul> </li> </ul>	8
Unit-VI	Traditional Textiles of India – Dyed, Painted & Printed	<ul> <li>An introduction to Dyed, Painted &amp; Printed Fabrics of India:</li> <li>Bandhani</li> <li>Kalamkari</li> <li>Madhubani</li> <li>Batik / other Resist dyeing</li> <li>Printed textiles of Rajasthan, Ajrakh,</li> <li>Dabu, Sanganer &amp; Bagru Prints, Block</li> <li>Printing</li> </ul>	4
Unit-VII	Traditional Textiles of India – Embroidered/ Ornamented	<ul> <li>An introduction to Ornamented Fabrics of India:</li> <li>Banjara work</li> <li>Embroideries of Kutch</li> <li>Kashida work from Jammu &amp; Kashmir</li> <li>Kasuti embroidery</li> <li>Kantha</li> <li>Chikankari</li> <li>Chamba Rumal</li> <li>Phulkari</li> <li>Abla Mirror</li> </ul>	4

## 9. Distribution of Marks:

Chapter		7	Type of Question								
Chapter No	Chapter Title	Objective	Short	Descriptive	Total						
NO		Type	Questions	Questions	Marks						
Unit-I	An Introduction to Textiles and Clothing	1	2	-	3						
Unit-II	Influence of various Civilizations on Textiles	7	3	5	15						
Unit-III	The Basics of Fashion	7	3	10	20						
Unit-IV	Textiles of India – Evolution of Fashion through the years	2	3	-	5						
Unit-V	Traditional Textiles of India – Motifs & Handwoven	3	5	5	13						
Unit-VI	Traditional Textiles of India – Dyed, Painted & Printed	3	4	-	7						
Unit-VII	Traditional Textiles of India – Embroidered/ Ornamented	2	-	5	7						
	TOTAL	25	20	25	70						

# DETAILED TABLE OF SPECIFICATIONS FOR THEORY

Sr. Topic		OBJECTIVE TYPE			SHORT ANSWER TYPE					ESSAY TYPE					
INO		K	С	A	T	K	С	A	HA	T	K	С	A	НА	T
1	An Introduction to Textiles and Clothing	1			1		2			2					
2	Influence of various Civilizations on Textiles	7			7		3			3	5				5
3	The Basics of Fashion	3	4		7	3				3	5	5			10

4	Textiles of India – Evolution of Fashion through the years	2		2	3			3			0
5	Traditional Textiles of India – Motifs & Handwoven	2	1	3	2	3		5		5	5
6	Traditional Textiles of India – Dyed, Painted & Printed	3	1	4	3			3			0
7	Traditional Textiles of India – Embroidered/ Ornamented	2		2				0	5		5

### Annexure-I

### TABLE OF SPECIFICATIONS FOR THEORY

S. N	Topic (a)	Time allotted in hours (b)	Percentage Weightage (c)	K	С	A	НА
1	An Introduction to Textiles and Clothing	2	4.65	1	2		
2	Influence of various Civilizations on Textiles	10	23.25	12	3		
3	The Basics of Fashion	12	27.93	11	9		
4	Textiles of India – Evolution of Fashion through the years	3	6.97	5			
5	Traditional Textiles of India – Motifs & Handwoven	8	18.6	4	4	5	
6	Traditional Textiles of India – Dyed, Painted & Printed	4	9.3	6	1		
7	Traditional Textiles of India – Embroidered/ Ornamented	4	9.3	7			
	Total	43	100				

K = Knowledge C = Comprehension A = Application

HA = Higher Than Application

## 10. Suggested Implementation Strategies:

The syllabus can be completed by regular classes, special classes using audio –visual aids, tutorial classes and providing writing materials.

## 11. Suggested learning Resource:

- i. Parul Bhatnagar, Traditional Indian Costumes
- ii. James Ezekiel, An insight into Fashion History
- iii. Cally Blackman, 100 years of Fashion
- iv. DK Fashion, The definitive History of Costume & Style
- v. Christopher Breward, The Culture of Fashion
- vi. Jill Condra, The Greenwood encyclopedia of clothing through World History
- vii. Ritu Kumar, Costumes & Textiles of Royal India
- viii. Vandana Bhandari, Costumes, Textiles & Jewellery of India
  - ix. Anne Marie Soto, Clothing Fashion, Fabrics & Construction
  - x. H. Eberle, H. Hermeling, M. Hornberger & others, Clothing Technology from Fibre to Fashion
  - xi. Gurmit Matharu, What is Fashion Design?

1. Course title : GARMENT CONSTRUCTION-I (PRACTICAL)

**2. Course code** : GT/FT-303

**3. Semester** : 3<sup>rd</sup>

**4. Rationale of the course**: In garment construction, seams are classified by their type and position in the finished garment. Seams are finished with a variety of techniques to prevent raveling of raw fabric edges and to neaten the inside of garments.

### **5. Course Outcome:**

- Describe manufacturing process chart and manufacturing flow chart
- Use appropriate non automatic manufacturing tools
- To know the history of sewing machine and care and maintenance
- To make seams and appropriate uses of the seams
- Knowledge about the hand stitches and uses
- Knowledge about the marking tools
- How to use measuring tools

### **6.** Teaching scheme (in hours)

Lecture	Tutorial	Practical	Total
12	-	88	100

### 7. Examination Scheme

Theory				Practical			
Examination Full Marks	Sessional Full Marks	Total Marks	Pass Marks	Practical	Practical Assessment	Total Marks	Pass Marks
-	-	-	-	100	100	200	66

Unit	Topics	Sub Topics	Hours
Unit-I	Formation of Seam & Stiches	Seams  Class I: Superimposed Seam French seam Pipe Seam Class-II: Lapped Seam Lapped felled Welted Seam Class III: Bound Seam (4 Types) Class-IV: Flat Seam Class-V: Decorative Stitch Class-VI: Edge neating Class-VII Seams Class-VIII Seams Class-VIII Seams Class 200 Stitches originating as hand stitch	34 + 5L

		<ul> <li>Class 300 lock stitches</li> <li>Class 400 Multi thread chain stitches</li> <li>Class 500 Over edge chain stitches</li> <li>Class 600 covering chain stiches</li> </ul>	
Unit-II	Fabric Cutting	<ul> <li>Laying the pattern on the fabric</li> <li>Nature of fabric with respect to surface</li> <li>Characteristic of fabrics (One side/ both sided/ one way or either way)</li> <li>Cutting of fabrics as per patterns (basic bodice, sleeves, collars and basic skirts, Aline, flared)</li> </ul>	24 + 4L
Unit-III	Garment Construction	<ul> <li>(Only on Muslin)</li> <li>Stitch a Basic Bodice with a finished neckline (only half of front and half of back)</li> <li>Sleeve attachment to the Bodice</li> <li>Stitch a Tailored Skirt (only half of front and half of back)</li> <li>Stitch a Basic Tailored Torso with darts (only half of front and half of back)</li> </ul>	20 + 3L
Unit-IV	Test-and-Fit	To test the fittings of the above constructed garments on dress forms.	10

**9.-Suggested implementation Strategies:** The syllabus can be completed by regular classes, special classes using audio- visual audio aids, tutorial classes and providing writing materials. Practical classes in the laboratory help students to understand the subject.

### 10. Suggested learning resource:

- i) The Technology of Clothing Manufacture By Carr & Latham
- ii) Zarapkar, Couture sewing techniques
- iii) Pattern making for fit and fashion by Helen Armstrong
- iv) Pattern making by Winifred Aldrich
- v) Dress Pattern Designing Natalie Bray
- vi) Anne Marie Soto, Clothing Fashion, Fabrics & Construction
- vii) Peg Couch, Garment Construction: A complete course on Designing & Making Clothing for fit and fashion (Illustrated guide to sewing)
- viii) H. Eberle, H. Hermeling, M. Hornberger & others Clothing Technology from Fibre to Fashion

1. Course title : SURFACE ORNAMENTATION -II

**2. Course code** : GT/FT-304

**3. Semester** : 3<sup>rd</sup>

4.**Rationale of the course**: Computerized embroidery machines are specialized machines that can create embroidery from computerized designs. Design software exist in various form, either as special- purpose tools for various design stages or as complete design.

5. Teaching scheme (in hours)

Lecture	Tutorial	Practical	Total
-	-	75	75

### 6. Examination Scheme

Theory				Practical			
Examination Full Marks	Sessional Full Marks	Total Marks	Pass Marks	Practical	Practical Assessment	Total Marks	Pass Marks
-	-	-	-	100	100	200	66

Chapter No	Chapter Title	Content	Hours
Unit-I	Identification of Embroidery Machine	1.1 Heads, 1.2 Area, 1.3 Pantograph, 1.4 Needle option	10
Unit-II	Types of stitches used in punching	2.1 Satin stitches 2.2 Tatami stiches 2.3 chain stitches 2.4 Cording 2.5 Outline 2.6 Applique	10
Unit-III	Introduction to Embroidering software	3.1- Introduction to different embroidery software 3.2 Programmed layout and general settings 3.3- Embroidery and digitizing creation technique 3.4- Properties , fabrics, styles and template 3.5- Embroidery connectors	13
Unit-IV	Design, editing and coloring	4.1- Uses of color way and color palate 4.2- Types of lettering with stich designs 4.3- Digitizing, free shapes, borders, back stich, stem stich 4.4- creating contour fills	11
Unit-V	Changing system settings and designs	<ul><li>5.1- Grid display, automatic save option and general option</li><li>5.2- Eliminating controlling, reducing stiches</li></ul>	13

		5.3- Creating monograms designs 5.4- Transfer design to machine 5.5- Editing, transforming, adjusting, scaling letters	
Unit-V	Sample Preparation	6.1- Prepare samples (one of each) by using the stitched learned in Unit-II. 6.2- Prepare samples using computerized embroidering machine with multi colour threads (minimum 4 colours)	18

## 8. Suggested Implementation Strategies:

The syllabus can be completed by regular classes, special classes using audio –visual aids, tutorial classes and providing writing materials. Practical classes in the laboratory help students to understand the subject.

1. COURSE TITLE : KNITWEAR TECHNOLOGY

**2. COURSE CODE** : GT-305 **3. SEMESTER** : 3<sup>rd</sup>

**4. AIM OF THE COURSE**: After going through this subject, the students should be able to identify various knitted structures, classify different methods of production, analyze a garment to understand the various inputs involved in garment construction process, select appropriate seams and stitches for certain knitted structure and also test the knitwear quality parameters etc.

**COURSE OBJECTIVES**: At the end of the course, the students will be able to:

- 1) Explain Knitwear Technology
- 2) Explain Knitted Fabric properties
- 3) Classify of knitted garments according to general production method
- 4) illustrate the techniques of Integral garment production
- 5) Give details of stitch geometry, seams, sewing machines
- 6) Test and control knitted garments quality

**PREREQUISITES:** Before undergoing the course the students should have some basic knowledge of language, calculating, sketching, identifying textile materials, garment construction, drafting and pattern making, cutting according to pattern etc.

## **5. Teaching scheme (in hours)**

Lecture	Tutorial	Total	Practical	G. Total
42 + 3	1	45	1	45

### 6. Examination Scheme

	Theory	Practical					
Examination	Sessional	Total	Pass	Practical	Practical	Total	Pass
Full Marks	Full Marks	Marks	Marks	Fractical	Assessment	Marks	Marks
70	30	100	33	-	-	-	-

Chapter No	Chapter Title	Content	Hours
Unit-I	Introduction	1. 1 Introduction to Knitwear Industry	4
	to Knitwear	1.2 Concept and history of knitting Technology in	
	Technology	India and abroad	
		1.3 Diversification of products-application of knitwear	
		in different fields of textiles	
		1.4 Classification of knitting machineries.	

Unit-II	Knitted Fabric	2.1 Properties of Knitted Fabric as compared to woven	8
	properties	fabrics	J
	properties	2.2 Terms and definitions of knitting ,symbolic and	
	•	graphical representation of different knitted structures	
		2.3 Classification of weft knitted structure	
		2.4 Properties and uses of plain knit structure	
		2.5 Properties and uses of Rib structure	
		2.6 Properties and uses of interlock structure	
		2.7 Properties and uses of interfock structure  2.7 Properties and uses of purl structure.	
Unit III	Knitting	3.1Outline of knitting machines-weft knitting ,warp	3
Ollit III	Machine	_ = 1	3
	Maciline	knitting	
		3.2 Function of different knitting machine parts	
		3.3 Yarn supply packages for weft and warp knitting	
	Clarate :	machines	10
	Classification	4.1 Classification of knitted garments according to	12
	of knitted	general production method	
	garments	4.2 Fully cut method	
		4.3 Marker making ,spreading and cutting of fully cut	
Unit-IV		garments	
		4.4 Spirality ,causes and effect ,measures to minimise	
		it	
		4.5 Cut stitch shaped garments production method	
		4.6 Fully fashioned method ,shape generation &	
		fashioning frequency	
	Integral	5.1 Concept of Integral garments	5
	garments	5.2 Basic techniques of production -course shaping,	
Unit-V		wale shaping	
		5.3 Tubular knitting ,running on ,change of stitch type	
		and casting off	
		5.4 Machine knitted integral garments-half hose ,panty	
		hose.	
	Stitch	6.1 classification of stitches according to British	6
	geometry,	Standard	
	seams ,sewing	6.2 Single chain stitch and its application in knitwear	
Unit Vl	machines	seaming	
Unit VI		6.3 Run in ratio, three variables determining stitch	
		geometry	
		6.4 Application of two thread chain stitch, three thread	
		overlock stitch, multi thread chain stitch, lock stitch.	
	Knitted fabric	7.1 Knitted fabric quality-loop density, course length,	4
	and garment	wt/unit area, cover factor	
Unit VII	quality	7.2. Knitted garment faults-vertical faults, horizontal	
		faults, stains ,pilling	
		7.3 knitted garment quality control	

## 8. Distribution of Marks:

Chapter		ገ	Type of Question	on	Total
Chapter No	Chapter Title	Objective	Short	Descriptive	Marks
110		Type	Questions	Questions	Warks
Unit I	Introduction to	2	4	_	6
Omt 1	Knitwear Technology	2	7		U
Unit II	Knitted Fabric	6	4	4	14
Omt n	properties	Ü	4	4	14
Unit III	Knitting Machines	2	3		5
Unit IV	Classification of	6	7	7	20
Omt IV	knitted garments	U	/	/	20
Unit V	Integral garments	2	4	3	9
	Stitch geometry,				
Unit Vl	seams, sewing	4	3	2	9
	machines				
Unit	Knitted fabric and	3	4		7
Vll	garment quality	3	+		,
		Total			70

## 9. TABLE OF SPECIFICATION:

## TABLE OF SPECIFICATIONS

Sr No	Topic	Time allotted in hours	Percentage Weightage	K	С	A	НА
1	Introduction to Knitwear	4	10	3	3		
	Technology						
2	Knitted Fabric properties	8	20	4	6	4	
3	Knitting Machine	3	6	2	3		
4	Classification of knitted garments	12	30	9	9	2	
5	Integral garments	5	12	4	4	1	
6	Stitch geometry ,seams ,sewing	6	12	3	4	2	
	machines						
7	Knitted fabric and garment quality	4	10	3	4		
	Total	Σ b=42	100				

K = Knowledge C = Comprehension A = Application HA = Higher Than Application (Analysis, Synthesis, Evaluation)

### **DETAILED TABLE OF SPECIFICATIONS**

Sr. No	Topic	OBJECTIVE TYPE			SHORT ANSWER TYPE				ESSAY TYPE						
140		K	C	Α	T	K	C	Α	HA	T	K	C	Α	HA	T
1	Introduction to Knitwear Technology	1	1		2	2	2			4					-
2	Knitted Fabric properties	2	2	2	6	2		2		4		4			4
3	Knitting Machine	1	1		2	1	2			3					-
4	Classification of knitted garments	3	2	1	6	3	3	1		7	3	4			7
5	Integral garments	1		1	2	3		1		4		3			4
6	Stitch geometry, seams ,sewing machines	2	2		4	1	2			2	4		2		4
7	Knitted fabric and garment quality	1	2		3	2	2			4					4

K = Knowledge C = Comprehension A = Application

HA = Higher Than Application T = Total

### **References:**

- 1. Knitting Technology by Prof. D.B Ajgaonkar.
- 2 . Knitted Clothing Technology by Terry Brackenbury
- 3. Fundamentals and advances in knitting technology by Sadhan Ch. R

1. Course Title :- CLOTHING TECHNOLOGY

2. Course Code3. Semester3. THIRD

**4. Rational of the subject/ Courses:**- Clothing since ages is one of the basic necessities of methods. To make oneself and surrounding more attractive human being saw a great potential in textile fabrics, the creating demand of fashion fabric. Garment industry is one of the major industry for the Indian government, which brings in foreign exchange to the tune more than 20,000 crore Rupees per annum. Student will learn different sequential procedures for making garment in details like standard body measurements, pattern making, pattern drafting, stitching the fabric to form garment.

### **5. COURSE OUTCOMES:**

After completion of this course the student will be able

- Enlist the sequence of operations involved in the production of garments.
- Explain marker planning and spreading.
- Compare the different cutting devices and choose the appropriate one.
- Select the five different parameters influencing sewing.
- Identify the problems of sewing.
- Make use of proper trims in garments.

### **6.** Teaching Scheme (in hours)

Lecture	Tutorial	Practical	Total
42 + 3	-	-	45

### 7. Examination Scheme

	Theory			Practical					
Examination Full Marks	Sessional Full Marks	Total Marks	Pass Marks	Practical	Practical Assessment	Total Marks	Pass Marks		
70	30	100	33	-	-	1	-		

Chapter No	Chapter Title	Content	Duration (in hours)
1	Marker Planning	<ul><li>1.1 Definition of Marker Planning</li><li>1.2 Constraints of Marker Planning</li><li>1.3 Different methods of Marker Planning</li></ul>	6
2	Spreading of Fabric	<ul><li>2.1 Objects of Spreading.</li><li>2.2 Requirements of Spreading</li><li>2.3Methods of Spreading.</li><li>2.4 Different fabric packages.</li></ul>	2
3	Cutting of	3.1Object of Cutting	4

	Fabric	3.2Requirements of Cutting	
		3.3 Different tools for Cutting, their advantages	
		and disadvantages.	
4	Sewing of	Ţ.	
	Fabric	4.2 Proper selection of 5 parameters	
		4.3 Definition of Seam.	
		4.4 Different types of seam, their characteristics	
		and areas of use.	
		4.5 Definition of Stitch	
		4.6 Different types of Stitch, their characteristics	10
		and areas of use	10
		4.7 Different types of feed mechanisms, their	
		function, characteristics and areas of use	
		4.8 Different types of needles, Needle number,	
		Needle function.	
		4.9 Different types of sewing thread, their	
		characteristics and areas of use.	
5	Sewing	5.1 Problem of stitch formation	5
	Problems	5.2 Problem of fabric distortion	
		5.3 Problem of damage to fabric along stitch line	
6	Components	6.1 Labels	3
	and Trims	6.2 Linings & Interlinings	
		6.3 Wadding	
		6.4 Lace, Braid, Elastic	
		6.5 Hook & Loop Fastening.	
		6.6 Shoulder Pads	
		6.7 Eyelets & Laces	
		6.8 Zip Fasteners	
7	D .	6.9 Buttons	2
7	Pressing	7.1 Object of pressing	2
		7.2 Means of pressing	
0	Carrier	7.3 Pressing Equipment's and methods.	0
8	Sewing	8.1 Classification of sewing machines	8
	Machinery	8.2 Basic sewing m/c & associated work aids	
		Sewing m/c shapes, Requirement of work aids, Type of work aids,	
		slack feeding and elastication, cutting of threads	
		elastic and tapes, stackers.	
		8.3 Simple automatics	
		Buttonhole m/cs, Button sew m/cs, Bar tack	
		m/cs, Label sewers,	
		8.4 Automated Workstations.	
		8.5 Reprogrammable automated systems.	
		8.6 Development of robotics.	
9	Alternative	9.1 Fusing	2
	methods of	9.2 Welding & Adhesives	
	Joining Fabrics	9.3 Moulding	

## 9. Distribution of Marks:

		Ту	pe of Question	n	
Chapter No	Chapter Title	Objective Type (Compulsory)	Short Questions	Descriptive Questions	Total Marks
1	Marker Planning	1	2	6	9
2	Spreading of Fabric	1	4		5
3	Cutting of Fabric	4	4	8	16
4	Sewing of Fabric	5	2	17	24
5	Sewing Problems	2	1	5	8
6	Components and Trims	1		4	5
7	Pressing	1	2		3
	Total	15	15	40	70

# 10. Table of Specification 1

Sr.	Topic	O]		CTIV PE	Æ	SI	HOF	RT A	NSW PE	ER		ESS	SAY	TYPE	E	GT
No		K	С	A	T	K	С	A	HA	T	K	С	A	HA	T	
1	Marker Planning	3	1	0	4	0	0	0	0	0	6	0	0	0	6	10
2	Spreading of Fabric	3	0	0	3	2	0	0	0	2	0	0	0	0	0	5
3	Cutting of Fabric	3	0	0	3	2	0	0	0	2	5	0	0	0	5	10
4	Sewing of Fabric	5	0	0	5	4	2	2	0	8	10	4	0	0	14	27
5	Sewing Problems	0	1	2	3	1	0	0	0	1	0	5	0	0	5	9
6	Components and Trims	2	1	0	3	0	2	0	0	2	0	0	0	0	0	5
7	Pressing	3	1	0	4	0	0	0	0	0	0	0	0	0	0	4
	Total=	19	4	2	25	9	4	2	0	15	21	9	0	0	30	70

Sr.	Topic	Time allotted in hours	Percentage Weightage	K	С	A	НА	Total
No	(a)	(b)	(c)					
1	Marker Planning	6	14	9	1	0	0	10
2	Spreading of Fabric	3	7	5	0	0	0	5
3	Cutting of Fabric	7	17	10	0	0	0	10
4	Sewing of Fabric	16	38	19	6	2	0	27
5	Sewing Problems	5	12	1	6	2	0	9

6	Components and Trims	3	7	2	3	0	0	5
7	Pressing	2	5	3	1	0	0	4
	Total =	42	100	47	21	2	0	70

## 11. Books list

Sl.No	Title	Author/Publisher		
1	The Technology of Clothing Manufacture	Harold Carr & Barbara Lathan		
2	Introduction to Clothing Manufacture	Gerry Cooklin		
3	Garment Technology for Fashion Designer	Gerry Cooklin		
4	Clothing for moderns	Erain Mabel		
5	Apparel Production	Jacob Solinger		

1. Course title : PROFESSINAL PRACTICE -I

**2. Course code** : GT/FT-310

**3. Semester** : 3rd

**4.Rationale of the course** : To develop general confidence, ability to communicate and attitude, in addition to basic technological concepts through Industrial visits, expert lectures, seminars on technical topics and group discussion.

#### Aim

The Student will be able to:

- Acquire information from different sources.
- Prepare notes for given topic.
- Present given topic in a seminar.
- Students will learn to work in a team and with client-partners.
- Apply research to design.
- Develop approaches to use design in a real-world context

### **5.** Teaching scheme (in hours)

Lecture	Lecture Tutorial		Total	
-	-	50	50	

### 6. Examination Scheme

Theory				Practical			
Examination	Sessional	Total	Pass	Practical	Practical	Total	Pass
Full Marks	Full Marks	s Marks Marks	Practical	Assessment	Marks	Marks	
-	-	-	-	25	25	50	17

#### **6. Detail Contents**

### 1. INDUSTRIAL VISITS:

10

Structured industrial visits be arranged and report of the same should be submitted by the individual student, to form part of the team work.

Visits to **any two** of the following:

- Nearby shopping complex.(strategy, product specifications)
- Visit entrepreneurs (Observation of startup companies)
- Handloom/Powerloom /Workshop (Layout, Machines)
- Concept store-Handloom & Textile
- Garment manufacturing unit.
- Institute visit like NIFT

### 2. GUEST LECTURE (S)

6

- A) Lectures by Professional / Industrial Expert / Student Seminars.
  - Brand study identification, case study and trademark.
  - Market study- strategy and analysis.
  - Principles and elements of design.

- Softwares like adobe illustration and photoshop.
- Creative thinking skills
- Affiliated marketing
- Design development process (all technical aspects)
- Entrepreneurship

## B) Interaction with a designer

### 3. GROUP DISCUSSION:

6

The students should discuss in a group of six to eight students and write a brief report on the same as a part of team work. Two topics for group discussions may be selected by the faculty members. Some of the suggested topics are -

- i. Brand study
- ii. Trend forecasting
- iii. Fashion journalism( blogs)
- iv. Current topics related to creative designs.

### 4. STUDENT ACTIVITIES:

8

The students in a group of 3 to 4 will perform any one of the following activities (others similar activities may be considered Activity:

- i. Presentation on design analysis.
- ii. Collecting information from Market: case study
- iii. Design research.
- iv. Draw illustrations using Adobe software