#### CURRICULUM FRAMEWORK AND SYLLABI FOR

# BACHELOR OF COSTUME DESIGN AND FASHION FOR THE CANDIDATE TO BE ADMITTED FROM THE ACADEMIC YEAR (2021-2022) (UNDER CHOICE BASED CREDIT SYSTEM-CBCS)



#### DEPARTMENT OF HOME SCIENCE

MOTHER TERESA WOMEN'S UNIVERSITY

**KODAIKANAL** 

#### **B.Sc Costume Design and Fashion**

#### 1. About the Programme

The UG Programme in Costume Design and Fashionaims toempower women through imparting high level technical, creative and innovative skill in textile, garment and fashion. The Programme courses include Language Studies, Fashion Designing, Textile Studies, Apparel Designing, Marketing, Branding and Forecasting. The Programme is skill oriented and designed to arm a student with the knowledge to join entry level managerial positions such as Fashion coordinator, Designer, Fashion Stylist, Fashion Analysts, Production Executive, Merchandiser, Pattern maker, Freelancer, Quality Control Assistant, Costume Designer and to become as Entrepreneur in the field of textile, garment and fashion Industry.

#### 2. Programme Educational Objectives (PEOs)

PEO1	To coach the students to be competent in industry, academic, and in research in
	the field of garment and fashion technology
PEO2	To enable the students to possess professional and ethical values and demonstrate
	their spirit of excellence and leadership in careers
PEO3	To develop skills of the students in fashion and garment design
PE04	To mould the students as Garment Industry Professionals or freelance consultants
PE05	To practice them to become young Entrepreneur or Designers with their
	indigenous ideas.

#### 3. Eligibility:

• The candidates should have completed 10+2 or its equivalent exam in Science/Arts stream from any recognized board.

#### 4. General Guidelines for UG Programme:

**i. Duration:** The programme shall extend through a period of 6 consecutive semesters and the duration of a semester shall normally be 90 days or 450 hours. Examinations shall be conducted at the end of each semester for the respective subjects.

#### ii. Medium of Instruction: English

**iii.** Evaluation: Evaluation of the candidates shall be through Internal and External assessment.

Evaluation	The	eory	Practical			
Pattern	Min	Max	Min	Max		
Internal	10	25	10	25		
External	30	75	30	75		

• Internal (Theory): Test (15) + Assignment (5) + Seminar/Quiz(5) = 25

• External Theory: 75

#### **Question paper pattern for External examination for Core and Elective papers:**

Max. Marks: 75 Time: 3 Hrs.

S.No.	Part	Туре	Marks
1	A	10*1 Marks=10	10
		Multiple Choice Questions - 2 Questions from each Unit	
2	В	5*4=20	20
		Two questions from each Unit with Internal Choice (either / or)	
3	С	3*15=45	45
		Open Choice: Any three Questions out of 5 - one Question from each Unit	
		Total Marks	75

<sup>\*</sup>Minimum credits required to pass - 156.

### 5. Conversion of Marks to Grade Points and Letter Grade (Performance in a Course/ Paper)

Range of	Grade Points	Letter Grade	Description
Marks			
90 – 100	9.0 - 10.0	0	Outstanding
80-89	8.0 - 8.9	D+	Excellent
75-79	7.5 - 7.9	D	Distinction
70-74	7.0 - 7.4	A+	Very Good
60-69	6.0 - 6.9	A	Good
50-59	5.0 - 5.9	В	Average
40-49	4.0 - 4.9	C	Satisfactory
00-39	0.0	U	Re-appear
ABSENT	0.0	AAA	ABSENT

#### 6. Attendance

Students must have earned 75% of attendance in each course for appearing for the examination. Students with 71% to 74% of attendance must apply for condonation in the Prescribed Form with prescribed fee. Students with 65% to 70% of attendance must apply for condonation in the Prescribed Form with the prescribed fee along with the Medical Certificate. Students with attendance lesser than 65% are not eligible to appear for the examination and they shall re-do the course with the prior permission of the Head of the Department, Principal and the Registrar of the University.

**7. Maternity Leave** – The student who avails maternity leave may be considered to appear for the examination with the approval of Staff i/c, Head of the Department, Controller of Examination and The Registrar.

#### 8. Any Other Information:

In addition to the above regulations, any other common regulations pertaining to the UG Programmes are also applicable for this programme.

### 9. Programme Outcomes(POs) On completion of the R Sc. Costume Design as

On completion of the B.Sc. Costume Design and Fashion Programme, the students will be able to

- PO:1 Qualify for higher education, government service, industry needs and for startup of business units.
- PO:2 Understand the fundamentals in the field of textiles, apparel and fashion
- PO:3 Enhance their technical and computing skills as to develop creativity and self-confidence.
- PO:4 Increase their higher thinking skill and professionalism for industry relations
- PO:5 Explore knowledge on professionalism, soft skills, environment, social responsibility and human values.
- PO:6Complete understanding of current trends and advanced knowledge in costume, design and textile.
- PO:7 Acquire knowledge and abilities for self-development and to meet ongoing changes in global fashion and commercial market.

#### 10. Programme Specific Outcomes(PSOs)

## On completion of this B.Sc. Costume Design and FashionProgramme, the students will be able to

- PSO: 1 Have sound subject knowledge which form basis for technical understanding
- PSO: 2 Develop comprehensive and analytical skills in apparel and fashion industry
- PSO: 3 Acquire knowledge in textile and apparel production techniques.
- PSO: 4 function independently with their ability to design ordevelop products to meet global challenges of textile and apparel industry.
- PSO: 5 Develop employability and entrepreneur skills in textiles, clothing and fashion.

#### 11. Curriculum

## MOTHER TERESA WOMEN'S UNIVERSITY, KODAIKANAL DEPARTMENT OF HOME SCIENCE

### **B.Sc. Costume Design and Fashion**Framework of the Syllabus to be implemented from the Academic Year 2021-2022

Pape	Course		Credi Hours		M	aximum	Marks	
r No.	Code	Title of the Course	ts	Theory	Theory Practic al		EXT	Total
		SEMES	STER I	-				
1	U21LTA11	PART-I -TAMIL- I	3	6	0	25	75	100
2	U21LEN11	PART-II - ENGLISH -I	3	6	0	25	75	100
3	U21CDT11	CORE I - Fundamentals of Apparel Designing	4	5	0	25	75	100
4	U21CDP11	CORE II - Fundamentals of Apparel Designing Practical	4	0	6	25	75	100
5	U21CDA11	Computer Aided Design Practical-I	4	0	5	25	75	100
6	U21EVS11	Environmental Studies	2	2	0	25	75	100
7	U21PELS11	PROFESSIONAL ENGLISH- I PARTIII COURSE – Add on course.	4	6	0	25	75	100
		Total	24	3	6	-	-	700

		SEMESTER II										
8	U21LTA22	PART-I - TAMIL II	3	6	0	25	75	100				
9	U21LEN22	PART-I I- ENGLISH II	3	6	0	25	75	100				
10	U21CDT21	CORE III – Fiber to Fabric	4	5	0	25	75	100				
11	U21CDP22	CORE IV Textile Science Practical	4	0	5	25	75	100				
12	U21CDA22	ALLIED II - Computer Aided Design Practical-II	4	0	5	25	75	100				
13	U21VAE21	Value Education	3	3	0	25	75	100				
14	U21PELS22	PROFESSIONAL ENGLISH-II	4	6	0	25	75	100				
		Total	25	30	6	-	-	700				

	SEMESTER III										
15	U21LTA33	PART-I - TAMIL III	3	6	0	25	75	100			
16	U21LEN33	PART-II - ENGLISH III	3	6	0	25	75	100			
17	U21CDT31	CORE V –Fashion Designing	4	5	0	25	75	100			
18	U21CDA33	ALLIED III Fashion Illustration Practical	4	0	5	25	75	100			
19	U21CDE311/ U21CDE312/ U21CDE313	ELECTIVE –I- Fashion and Clothing Psychology/ Basics of Cosmetology/ Computer Applications in Textiles	3	4	0	25	75	100			
20	U21MSS31	SBE I – Managerial Skills	2	2	0	25	75	100			
21		Non-Major Elective – I	2	2	0	25	75	100			
	U21PELS33	Professional English III	4	6	0	25	75	100			
		Total	25	3	6	-	-	800			

		SEMESTER IV									
22	U21LTA44	PART-I - TAMIL IV	3	6	0	25	75	100			
23	U21LEN44	PART-II - ENGLISH IV	3	6	0	25	75	100			
24	U21CDT41	CORE VI Wet Processing	4	4	0	25	75	100			
25	U21CDP43	CORE VII Textile Dyeing and Printing Practical	4	0	4	25	75	100			
26	U21CDA44	ALLIED IV Principles of Pattern Making	4	4	0	25	75	100			
27	U21CDE421/ U21CDE422/ U21CDE423	ELECTIVE-II-Fashion Forecasting/ Fashion Communication/ Fashion Accessories	3	3	0	25	75	100			
28	U21CSS42	SBE II- Computer Skills for Office Management	2	0	2	25	75	100			
29		Non -Major Elective –II	2	2	0	25	75	100			
	U21PELS44	Professional English- III	4	6	0	25	75	100			
		Total	29	3	37	-	-	900			

	SEMESTER V							
30	U21CDT51	CORE VIII Fabric Structure and Design	4	5	0	25	75	100
31	U21CDT52	CORE IX Basics of Fabric Testing	4	5	0	25	75	100

		Total	25	3	0	-	-	700
36	U21CDS53	SKILL BASED ELECTIVE PAPER III Garment Development using CAD- Practical	2	0	2	25	75	100
		ELECTIVE –III Textiles and Costumes of India/ Indian Textile Industry/ Knitting	3	3		25	75	100
	U21CDP55	CORE XII Garment Construction Practical	4	0	5	25	75	100
33	U21CDP54	CORE XI Draping Techniques Practical	4	0	5	25	75	100
32	U21CDT53	CORE X Sewing Techniques	4	5	0	25	72	100

	SEMESTER VI										
37	U21CDT61	CORE XIII Export Documentation	4	5	0	25	75	100			
38	U21CDT62	CORE XIV Organization of Garment Unit	4	5	0	25	75	100			
39	U21CDT63	CORE XV Garment Quality and Cost Control	4	5	0	25	75	100			
40	U21CDT64	CORE-XVI Clothing Care and Maintenance	4	4	0	25	75	100			
41	U21CDP66	CORE-XVII Fashion Portfolio Presentation Practical	4	0	6	25	75	100			
42	U21CDE641/ U21CDE642/ U21CDE643	ELECTIVE –IV Apparel Marketing/ Basics of Non-Woven / Eco Fashion	3	3	0	25	75	100			
43	U21CDS64	SKILL BASED ELECTIVE PAPER IV Surface Ornamentation Practical	2	2	0	25	75	100			
44	U21EAS61	Extension Activities	3	0	0			100			
	Total		28	3	0	-	-	800			
		Grand Total	156 Credits	205 Hours				4600			

U21CDO31 Online Course 3<sup>rd</sup> Semester U21CDI41 Internship 4<sup>th</sup> Semester

U21CDV51 Value Added Courses 5<sup>th</sup> Semester (Aari Embroidery) Each Carries 2 Credits to be included as additional Credit courses.

B. Sc Textiles and clothing (Three year Under Graduate Programme):

- 1. 8 Language Papers
- 2. 17 Core papers (11 Theory + 6 Practical)
- 3. 4 Allied Papers (1 Theory +3 Practical)
- 4. 4 Elective papers with 3 optional papers
- 5. 2 Non -Major Elective (NME) with two optional papers
- 6. 4 Skill Based Elective (SBE)
- 7. Professional English -Add on Course 4 Credits- 6 Hours

#### NON-MAJOR ELECTIVE

Paper Code	Course Title	Hours	Credits	Continuous Internal Assessment (CIA)	End Semester Exam (ESE)	Total
U21CDN311	Non -Major Elective -I Fashion Concepts	2	2	25	75	100
U21CDN312	Traditional Indian Textiles	2	2	25	75	100
U21CDN421	Non -Major Elective -II Fundamentals of Embroidery	2	2	25	75	100
U21CDN422	Basic Garment Sewing Techniques	2	2	25	75	100

#### **Programme Outcomes (POs)**

On completion of this Programme, the learners will be able to

PO1:get qualified for higher education, government service, industry needs and for startup of business units.

PO2: understand the fundamentals in the field of textiles, apparel and fashion.

PO3: enhance their technical and computing skills to develop creativity and self-confidence.

PO4: increase their higher thinking skill and professionalism for industry relations.

PO5: explore knowledge on professionalism, soft skills, environment, social responsibility and human values.

PO6: acquire complete understanding of current trends and advanced knowledge in costume, design and textile.

PO7: acquire knowledge and abilities for self-development and to meet the ongoing changes in global fashion and commercial market.

#### **Programme Specific Outcomes (PSOs)**

On completion of this Programme, the learners will

PSO: 1 have sound subject knowledge which forms the basis for technical understanding.

PSO: 2 develop comprehensive and analytical skills in apparel and fashion industry.

PSO: 3 acquire knowledge in textile and apparel production techniques.

PSO: 4 function independently with their ability to design ordevelop products to meet global challenges of textile and apparel industry.

PSO: 5 develop employability and entrepreneur skills in textiles, clothing and fashion.

#### Semester-I

Course Code	U21CDT11	F	FUNDAMENTALS OF APPAREL DESIGNING	L	T	P	C		
				6	•	-	4		
Cognitive le	vel	K1: Recall K2: Understand							
Learning O	bjectives	To impart thorough knowledge on the parts and function of the sewing machine.							
		To enable students to gain knowledge about seams and seam finishes.							
		To gain skills in sewing techniques							

#### **UNITI Sewing EquipmentandSeams**

Sewing machines- parts and their function, care and maintenance. Tools for measuring, marking, cutting and pressing. Selection of thread and needle for various types of fabric. Seams, seam finishes and hems-Definition, Techniques and types.

#### **Unit II FullnessandSkirts**

Fullness: Definition, Types of fullness – Darts, Tucks, Pleats, flares, godets, gathers, shires and frills. Calculating the number of materials for these types. Skirts: Different types of skirts – Drafting patterns for flares, gathered, pleated, gored, semicircular and circular skirts.

#### **Unit III Necklines, Plackets and Fasteners**

Neck Finishes: -Definition, Bias- definition, joining bias and uses. Bias facing andbias binding.

Plackets- Definition, characteristics of a good placket, classification – continuous, bound and faced, fly opening, zipper, tailored placket.

Fasteners - Buttons and its types-steps in attaching buttons. button hole- types of buttonhole Button loops- thread loops, fabric loop, corded loop, corded frogs. Button and button hole position and length of the button hole-other types of fasteners.

#### **Unit IV SleevesandCollars**

Sleeves: - Classification of sleeves, types of sleeves- plain, puff at top, bottom, bell, bishop, circular, leg-o-mutton, sleeveless styles, kimono & raglan. Pattern preparation for these sleeves.NeckCollars – definition, parts of collar, factors to be considered in designing collar, classification of collar. Drafting for peter pan, cape, scallop, puritan, sailors, Chinese collar.

#### Unit V Pockets, YokesandTrimming

Pockets- Definition, classification, selection of pocket and creating variety in pockets. Yokes - Definition, selection of yoke design, creating variety in yoke. Drafting patterns for yoke without fullness yoke with fullness within the yoke and yoke supporting or releasing fullness. Attachment of yokes. Trimmings and Decoration - Definition, types -Bias trimming, Ricrac, ruffles, embroidery, smocking, faggoting, Applique, lace, lace motifs, scallopededging, decorative fastening belts and bows.

#### **References:**

#### **Text Books:**

- 1. Patrick John Ireland., Encyclopedia of Fashion Details, Om Books International, New Delhi. (2005).
- 2.Besty-Hose good, The Complete Book of Sewing, Dorling Kindersley Ltd., London. (2006).
- 3.Harold Carry and Barbara Latham., The Technology of Clothing Manufacture, Om Book Service, New Delhi. (2005).

#### **References:**

- 1. Zarapkar K.R, System of Cutting, Navneet Publications India (2005)
- 2.Lorna Knigh, Sewing Tips, Techniques and Trade Secrets, St. Martin's Press, New York. (2010).
- 3.Karthik T., Ganesan P., Gopalakrishnan, D, Apparel Manufacturing Technology, CRC Press, U.S. (2016),

#### **COURSE OUTCOME**

On successful completion of the course, the students will be able to

K1	CO1	gain knowledge of parts and function of the sewing machine
K2	CO 2	acquire knowledge of fullness
K2	CO 3	understand the classification of sleeves.
K2	CO 4	sew different type of neck finishes, yokes and pockets
K2	CO5	prepare basic garment construction techniques

#### **Mapping of Cos with POS & PSOs:**

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	M	S	S	S
CO2	S	S	S	S	S	S	S	S	M	S	S	S
CO3	S	S	S	S	S	S	S	S	M	S	S	S
CO4	S	S	S	S	S	S	S	S	M	S	S	S
CO5	S	S	S	S	S	S	S	S	M	S	S	S

Strongly Correlating(S) - 3Marks
Moderately Correlating(M) - 2 marks
Weakly Correlating(W) - 1 Mark
No Correlation(N) - 0 Mark.

Course Code	U21CDP11	FUNDAMENTALS OF APPAREL DESIGNING PRACTICAL	L	T	P	С	
CORI	E II	DESIGNING FRACTICAL	-	•	6	4	

Cognitive level	K2: Understand
	K3: Apply
	K4: Analyze
<b>Learning Objectives</b>	1. To impart thorough knowledge on the parts and function of the sewing
	machine
	2. To impart practical exposure in sewing operation.
	3. To acquaint students with the knowledge on basic sewing techniques.
	4. To impart the knowledge and skills required for garment designing.

- 1. Threading practice and sample preparation for Single Needle Lockstitch Machine
- 2. Preparation of samples for seam plain, top stitch, welt, lapped, slot, flat fell, French seam, mantua makers and piped seam.
- 3. Preparation of samples for seam finishes pinked finish, Edge stitched, double stitch finish, overcast, herringbone and bound seam edge finish.
- 4. Hems stitched and turned hem, seam binding hem finish, catch stitched hem, narrow machine stitched hem, rolled or whipped hem and shell edged hem.
- 5. Preparation of samples fordarts darts single pointed and double pointed darts.
- 6. Preparation of samples for tucks pin, piped or corded, shell or scalloped, cross, group tucking with scalloped effect.
- 7. Preparation of samples for pleats knife, box, inverted, kick, cartridge and pinch.
- 8. Preparation of samples for gathering by hand, machine, elastic, shirring or gauging.
- 9. Preparation of samples for ruffles single, double.
- 10. Preparation of samples for facing bias facing, shaped facing, and decorative facing.
- 11. Preparation of samples for binding single and double bias binding.
- 12. Preparation of samples for plackets continuous, bound and faced placket, zipper Placket and tailored placket.
- 13. Preparation of samples for sleeves plain sleeve, puff sleeve, bishop sleeve, raglan sleeve, circular sleeve.
- 14. Preparation of samples with yoke yoke without fullness, yoke with fullness within the yoke.
- 15. Preparation of samples for collar Peter Pan collar, Shirt collar, Chinese collar, shawl collar.
- 16. Preparation of samples for pocket Patch pocket and bound pocket. Side seam pocket.

#### **Text Books**

- 1. Gayatri Vermaand Kapil Dev Cutting and Tailoring Course. New Delhi: Asian Publishers. (2006).
- 2.Sumathi, G, Elements of Fashion and Apparel Design II Edition. New Age International Private Ltd Publications. (2005)

#### References

- 1. Zarapkar K.R, System of Cutting, Navneet Publications India (2005)
- 2. Hilary Campbell, Designing Patterns, Om Book Services, New Delhi-(2003)
- 3. Helen Joseph, Pattern Making for Fashion Design, Armstrong Education, Delhi (2000)
- 4. Mary Mathew, Practical Clothing Construction Part-II, Designing Drafting and tailoring Bhattarams Reprographic(P) Ltd- (1991)

#### **Course Outcome**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	The operation of sewing machine
К3	CO 2	Practiced the construction of seams, seam finishes, sleeves.
К3	CO 3	Illustrate and construction of different type of neck finishes
K4	CO 4	Examine variety in yokes and pockets
K4	CO 5	Analyzing the essential techniques for garment Component designing

#### Mapping of Cos with POS & PSOs:

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	M	S	S	S
CO2	S	S	S	S	S	S	S	S	M	S	S	S
CO3	S	S	S	S	S	S	S	S	M	S	S	S
CO4	S	S	S	S	S	S	S	S	M	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

Strongly Correlating(S) - 3Marks

Moderately Correlating(M) - 2 marks

Weakly Correlating(W) - 1 Mark

No Correlation(N) - 0 mark

Course Code	U21CDP11	COMPUTER AIDED DESIGN PRACTICAL-I	L	T	P	С
ALLII	E <b>D</b> I	FRACTICAL-I	-	-	5	4

Cognitive level	K2: Understand K3: Apply K4: Analysis
	K6: Create
Learning Objectives	<ol> <li>To impart thorough knowledge on CAD</li> <li>To impart practical exposure in developing designs for garment.</li> <li>To impart the knowledge and skills required for develop designs for Garment components.</li> </ol>

Create the following designs using CAD

- Motifs / small Designs for garments
- Different Necklines (any five)
- Sleeves (any five)
- Pockets (any five)
- Skirts (any five)
- Collars (any five)

#### **References:**

#### **Text Books:**

- 1. Alikhan, Computer Application in Textiles, Random Publications, New Delhi. (2013).
- 2. Frederick L. Chipkin., Adobe Photoshop for Textile Design, Origin Inc, NewYork. (2012).
- 3. Winifred Aldrich, CAD in Clothing and Textiles, Wiley, U.S, (1994).

#### **References:**

- 1. Frankie Ng and Jiu Zhou., Innovative Jacquard Textile Design using digital technologies, Woodhead Publishing, London. (2008).
- 2.Kathryn McKelvey and Janine., Munslow Fashion Design: Process, Innovation and Practice, Blackwell Science Ltd., Blackwell Publishing Company. United Kingdom., (2005).
- 3. Sandra Burke, Fashion Computing: Design Techniques and CAD, Burke Publishing, London. (2006).

#### **Course Outcome**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Knowledge on CAD for garment designing
К3	CO 2	Practical application in developing designs for garment
K4	CO 3	To analyze differentGarment components
K3	CO 4	To apply designs for specific Garment components
K6	CO 5	To create new designs for Garment components.

**Mapping of Cos with POS & PSOs:** 

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CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO 4	PSO5
CO1	S	S	S	S	S	S	s	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	s	S	S	S	S	S

Strongly Correlating(S - 3Marks Moderately Correlating (M)-2 Marks

Weakly Correlating(W)

- 1 Mark No Correlation(N) - 0 Mark

B.Sc TEXTILES AND CLOTHING, SYLLABUS, MTWU, 2021, KODAIKANAL,	
Semester-II	

<b>Course Code</b>	U21CDT21	FIBER TO FABRIC	L	T	P	C
		FIDER TO FADRIC	5	•	-	4
Cognitive lev	el K2: U	Inderstand				
	K3: A	apply				
	K4: A	analysis				
	K5: E	valuate				
Learning	The C	Course aims				
Objectives	>	To gain knowledge on fibers and its properties.				
	>	To understand the yarn manufacturing process.				
	>	To identify natural and man-made fibers.				
	>	Concept of fabric manufacturing process				

#### **Unit IIntroduction to the field of Textiles**

Introduction to the field of Textiles – major goals -Importance of Textiles, - Definition of Fibers, Classification of fibers – Natural and Man-made – Primary and Secondary characteristics of Textile fibers. Identification of textile fibers- microscopic test, Burning test and Solubility test.

#### **Unit IIManufacturing process**

Manufacturing process, physical, chemical, thermal and biological properties and uses of natural fibers – cotton, linen, jute, pineapple, hemp, silk, wool, hair fibers, Man-made fibers – viscose rayon, acetate rayon, nylon, polyester, acrylic.

#### **Unit III Spinning**

Spinning – definition, classification – chemical and mechanical spinning—workingprinciple of blow room—opening, cleaning, doubling, carding, combing, drawing, roving, spinning - Yarn classification – definition, classification – simple and fancy yarns, sewing threads and its properties.

#### **Unit IVWoven**

Woven – basic weaves – plain, twill, satin. Fancy weaves – pile, double cloth, leno, swivel, lappet, dobby and Jacquard Weaving technology – process sequence – machinery details.

#### **Unit VKnitting**

Knitting – definition, classification, differencebetween weaving and knitting - characteristics ofknitted goods. Difference between warp and weft knitting -Principles of knitting- general terms in knitting, parts of knitting machine, machine knitting needles.

#### References

#### **Text Books:**

- 1. DeepaliRastogi and Sheetal Chopra, Textile Science, Orient Black-Swan Private Limited, Hyderabad (2017).
- 2. Bernard P. Corbman, Textiles Fiber to Fabric, McGraw Hill International Editions, New Delhi, Sixth edition, (2005).
- 3. Kaplan, N.S., Textile Fibers, Abhishek Publications, Chandigarh (2008).

#### **Reference:**

- 1. PremonyGhosh, Fiber science and Technology, Tata McGraw- Hill Publishing Company limited, New Delhi. (2004)
- 2. Kothari, V. K, Progress in Textile Science, Vol I, II and III, IAFL Publications, New Delhi. (2010).
- 3. SeemaSekhri, Textbook of Fabric science, Fundamentals to finishing, PHI Learning Private limited, New Delhi. (2011).

#### **COURSE OUTCOMES**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Classification of fiber
K4	CO 2	Analyze manufacturing process of fibers and yarns
K2	CO 3	Concept of fabric manufacturing process
K5	CO 4	Compare the physical and chemical properties of Synthetic, Metallic and Mineral fibers
К3	C05	Identification of natural and man-made fibers

#### **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	M

Strongly Correlating (S) -MarksModerately Correlating (M)-2 marks Weakly Correlating (W) -1 MarkNo Correlation (N)-0 mark

Course Code	U21CDP22	TEXTILE SCIENCE PRACTICAL	L	T	P	С
CORE	IV		-	-	5	4

Cognitive level	K1: Recall
	K3: Apply
	K4: Analysis
	K5: Evaluate
<b>Learning Objectives</b>	To identify fiber and perform fiber test.
	To identify and perform yarn test.
	To identify and perform fabric test.

#### **Identification of textile fibers**

Cotton, Silk, Wool, Nylon, Polyester, Linen, Rayon, Jute.

- 1. Microscopic Method
- 2. Flame test.
- 3. Chemicaltest.

#### **Testing of yarns/ fabrics:**

- Counting of the yarn usingwrap reel.
- Counting of the yarn usingBeasley'sbalance
- Twist of the yarn usingtwisttester
- Determining the weight ofthefabric.
- Determining the fabriccountby
- a. Ravelingmethod
  - b. Pick glassmethod
  - Colour fastnesstowater

- TestofShrinkage.
- TestofAbsorbency

#### **Text Books**

- 1. Amutha. K A, Practical Guide to Textile Testing, CRC Press, (2016)
- 2. Raul Jewel, Textile Testing, APH Publishing Corporation, New Delhi, (2017)
- 3. Sheraz Ahmad et al., Advanced Textile Testing Techniques, CRC Press, (2017)

#### **Reference Books**

- 1. Jinlian Hu, Fabric Testing, Ed., Woodhead Publishing Ltd., (2008)
- 2.Butter worth's, Principles of Textile Testing: An Introduction to Physical Methods of Testing Textile Fibers, Yarns and Fabrics, J.E. Books, (1986)

#### **Course Outcome**

On successful completion of the course, the students will be able to gain knowledge about

K1	CO1	Physical identification of fiber specimen
K4	CO 2	Analyzation and identification of the fiber
K3	CO 3	Procedure for testing fiber, yarn and fabric.
K5	CO 4	Evaluation of count of yarn
K4	C05	Analyze the color fastness and shrinkage

#### **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	M
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S) - 3Marks

ModeratelyCorrelating(M) - 2 marks

WeaklyCorrelating(W) - 1 Mark

NoCorrelation(N) - 0 mark

<b>Course Code</b>	U21CDP11	COMPUTER AIDED DESIGN PRACTICAL-II	L	T	P	C
ALLIE	ED II	PRACTICAL-II	-	-	5	4

Cognitive level	K2: Understand
	K3: Apply
	K4: Analysis
	K6: Create
<b>Learning Objectives</b>	To impart thorough knowledge on CAD
	2. To impart practical exposure in developing designs for garment.
	3. To impart the knowledge and skills required for develop designs for
	Garment components.

- 1. Embroidery Designs for Kerchiefs (any five)
- 2. Create logos for branded companies (any five)
- 3. Create label for garments / companies (any five)
- 4. Prepare Designs for the following

Bib

Jabla

Apron

Princess line Dress

T-Shirt

#### **References:**

#### **Text Books:**

- 1. Alikhan, Computer Application in Textiles, Random Publications, New Delhi. (2013).
- 2.Frederick L. Chipkin., Adobe Photoshop for Textile Design, Origin Inc, New York. (2012).
- 3. Winifred Aldrich, CAD in Clothing and Textiles, Wiley, U.S, (1994).

#### **References:**

- 1. Frankie Ng and Jiu Zhou., Innovative Jacquard Textile Design using digital technologies, Woodhead Publishing, London. (2008).
- 2.Kathryn McKelvey and Janine., Munslow Fashion Design: Process, Innovationand Practice, Blackwell Science Ltd., Blackwell Publishing Company. United Kingdom., (2005).
- 3. Sandra Burke, Fashion Computing: Design Techniques Burke Publishing, London. (2006).

#### **Course Outcome**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Knowledge on CAD for garment designing
К3	CO 2	Practical application in developing designs for garment
K4	CO 3	To analyze different Garment components
K3	CO 4	To apply designs for specific Garment components
K6	CO 5	To create new designs for Garment components.

Mapping of Cos with POS & PSOs:

			COD III ZCZ			i e						
CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	SO 1	SO 2	SO 3	SO 4	PSO5
CO1	S	S	S	S	S	S	s	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	s	S	S	S	S	S

Strongly Correlating(S

- 3Marks Moderately Correlating (M)-2 Marks

Weakly Correlating(W)

1 Mark No Correlation(N) - 0 Mark

	SEM	ESTE	R-III	
			17-111	

<b>Course Code</b>	U21CDT31	FASHION DESIGNING	L	T	P	C						
CORE	V		5	-	-	4						
Cognitive level	K2: Under K3: Apply K6: Create											
Learning Objectives	To accordesign	uire knowledge about design basics, elements	and pr	incipl	es of							
	• To app	oly the elements and principles of design in textiles										
	• To lea	rn about textile designing and role of motifs in	n about textile designing and role of motifs in designing									

#### **UNIT IBasics of Design**

Basics of Design: Introduction, meaning and significance of good design—structural and decorative. Types of design: natural, conventional, geometric, abstract, historical. Good and Bad structural and decorative design.

Elements of design: Line – vertical, horizontal, zig-zag, diagonal, broken lines, curved line, shape or form, colour, texture, silhouette – Bell, buffont, back fullness, bustle tubular - Meaning, types and application on garments.

#### **UNIT IIPrinciples of design**

Principles of design – Balance – Formal and Informal, Rhythm –Through repetition, Radiation and Gradation, Emphasis – Grouping of design units, using contrast hues, by leading lines, a combination of any of the above, repeating details such as tucks, Gathers, Unusual Shapes and Textures, Applied design on a contrast background, Harmony and Proportion.

#### **UNITIIIColour**

Colour –Definition, Dimensions of colour, psychological effects of colour. Colour theories-Prang and Munsell, Colour harmonies - Monochromatic, analogous, Complementary, Double complementary, Spilt complementary and Triad colour harmony.

#### **UNIT IVTextile Design**

Textile Design-Meaning, Motif development – enlargement and reducing a motif, methodsfor modifying – manual and machine, placement of motif. Source of ideas: Library, Social networkingsites, e-books, CD's, Magazines.

#### **UNIT VApplication of Design**

Application of Design on bodice, skirt, trims, trousers, sleeve and collar Application of the design basics- principles and elements of design on specific body types: fat, thin body type, short, tall, flat bust, heavy bust, heavy thigh, too thin and deformed and abnormal body.

#### **Reference:**

#### **Text Books:**

- 1. Jenny Davis, A Complete Guide to Fashion Designing, First Edition, Abhishek Publications, Chandigarh. (2006).
- 2. Mahadevan M.G, Textile coloring, First Edition, Abhishek Publication, Chandigarh. (2008).
- 3. Premlata Mullica, Text book of Textile Designing, Kalyani Publishers, Ludhiana. (2006).

#### References:

- 1. Kathryn McKelvey and Janine -Munslow Fashion Design: Process, Innovation and Practice, Blackwell Science Ltd., Blackwell Publishing Company, UK. (2005).
- 3. Parachure, J. W, Fundamentals of Designing for Textiles and other end use, Woodhead publishing, India, New Delhi, (2009).
- 4. Dorling Kindersley., Fashion, The Ultimate Book of Costume and Style, Dorling Kindersley Limited; London. (2012).

#### **Course Outcomes**

On successful completion of the course, the students will be able to

K2	CO1	know the concept of design and its application
К3	CO 2	apply the principles of designon garment designs
K2	CO 3	understand color systems and theories
K6	CO 4	develop of textile designs by creation of motif
К3	CO 5	apply the design concepts for specific body types

#### **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	<b>PO7</b>	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S)-3Marks WeaklyCorrelating(W) -1 Mark  $\label{eq:moderatelyCorrelating} \begin{array}{lll} ModeratelyCorrelating(M) & - & 2 \ marks \\ NoCorrelation(N) & - & 0 \ mark \\ \end{array}$ 

Course Code	U21CDA33	FASHION ILLUSTRATION-PRACTICAL	L	Т	P	С	
ALLIED	III		-	-	-	4	
Cognitive level  K2: Understand  K3: Apply  K4: Analysis  K5: Evaluate							
Learning Objectives  To give a thorough knowledge on illustrating gar To impart practical knowledge in sketching facia head theories. To equip the students with skill in sketching fash accessories							

#### Preparesketchesfor the following

- 1. Practice of different types of line, shape, shading and smudging techniques
- 2. Sketching different garment components—(sleeves/ necklines/ collars/pockets)
- 3. Sketching of garment design using elements and principles of design
- 4. Sketching of garment design using colour theories and harmony
- 5. Drawing different Hair Styles
- 6. Sketching different Jewelleries
- 7. Fashion Accessories Bag, Belt, Shoe
- 8. Head Theory 6 (Child), 8, 10 and 12 (Men / Women)
- 9. Drawing front and side view of face-Various facial features Lips, Nose, Eyes, Ears, Hand and Leg
- 10. Application of garments and accessories on Child / Men / Women

#### **Text books**

- 1. RanjanaSinghal, Kannari Bharat, Fashion Rendering, OM books International., Abridged, (2010).
- 2. Raviraj, Pencil Shading Basic Techniques. New Century Book House Pvt Ltd., Chennai (2007).
- 3. PoojaKhurana& Monika Sethi, Introduction to Fashion Technology, Firewall Media Pvt. Ltd., New Delhi, (2007)

#### Reference books

- 1. PundalikVaze, JyotsnaPrakashan, How to Draw and Paint, Pune, II Edition (2002).
- 2. Steven Stipel man, Illustrating Fashion Concept to Creation, Fairchild publication. New York, II edition. (2005).
- 3. Kathryn Hagen, Fashion illustration for Designers. Pearson education, Inc., New jersey (2005)
- 4. BinaAbling, Fashion Sketch Book. Om Books International, New Delhi, 4th Edition, (2004).
- 5. NavneetKaur, Comdex Fashion Design: Fashion Concepts. Dream tech Press, New Delhi (2010).

#### **Course Outcomes**

On successful completion of the course, the students will be able to gain knowledge about

K3	CO1	Application of design elements, principles and colours on garment design
K2	CO 2	Development of designs for various garment components
K4	CO 3	Sketching facial features and head theories
K4	CO 4	Analyze designs for sketching fashion accessories
K5	C05	Evaluate the sketching of facial features

#### **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S) - 3Marks

Moderately Correlating(M) - 2 Marks

Weakly Correlating(W) - 1 Mark

NoCorrelation(N) - 0 mark

# SEMESTER IV

Course Code	U21CDT41	WET PROCEEDING	L	T	P	С		
		WET PROCESSING						
CORE	VI		-	4	-	4		
Cognitive level  Learning Objective	K3 K4 K6	<ul> <li>K2: Understand</li> <li>K3: Apply</li> <li>K4: Analyze</li> <li>K6: Create</li> <li>➤ To enable the students to gain knowledge invarious processing methods</li> <li>➤ To educate the students on Dyeing techniques</li> </ul>						
		<ul> <li>To impart knowledge on methods of Printing</li> <li>Understand principles of dyeing and printing in relation to various types of dyes</li> <li>Develop technical ability in dyeing and printing with different dyes on different fabrics</li> </ul>						

#### **UNITIPreparatory processes**

Preparatory processes – Need for processing and its classification-Fabric preparation process–singeing, Desiring, scouring, bleaching, mercerizing and degumming– definition, Methods and usage.

#### **UNITIIDyeing**

Stages of Dyeing – Dyes – Classification and Fastness properties of dyesdirect, vat, reactive, acid, basic, azoic dyes. Vegetable dyes – types used, significance of vegetable dyes. Mordant – Introduction, Importance, Role of mordant in Dyeing.

#### **UNIT-IIIDyeing technique**

Dyeing techniques- Fiber, yarn, fabric and garment – process involved, advantages and limitations. Methods of Dyeing-Stock, yarn, piece, solution, cross and garment dyeing Batch dyeing – Winch, Jig, Padding, Package dyeing, Combination dyeing - machines used and process involved. Recent techniques inDyeing.

#### **UNIT-IVMethods of printing**

Methods of printing – Types, preparation of screen, printing process, Discharge printing – chemicals used, process involved. Resist printing- batik printing, Tie anddye -Process sequence and techniques used. - Direct printing, Block printing, Stencil printing. Recent developments in printing methods.

#### **UNIT-VEffluent treatment**

Effluent treatment – Effluent, Introduction, types of effluent from textile unit, Characteristics and treatment of Textiles processing effluents. Effluent treatment processes- Primary, Secondary and Tertiary treatments. Recent trends in effluent treatment techniques.

#### **References:**

#### **Textbooks:**

- 1. Kapoor Seema, Dyeing of Textile material, Sonali Publication, New Delhi, (2012).
- 2. Arora. A., Textbook of Dyes, Sonali Publications, New Delhi. (2011).
- 3. Niyati Bhattacharya, Natural dyes for Textiles and their eco-friendly application, IAFL Publication, New Delhi. (2010).
- 4. Wingate IB, Textiles-Fabrics and their Selection, Allied Publishers, Chennai (2006).
- 5. Navneetkaur, Comdex Fashion Design: Fashion Concepts, Tech Press., New Delhi,

VoI-I (2010)

#### **References:**

- 1.Jamshed A Khan, Eco-Friendly Textile Dyeing and Finishing, Scitus Academics LLC, (2016).
- 2.T.L.Vigo, Textile Processing and Properties: Preparation, Dyeing, niching and Performance, Elsevier, Netherland. (2013).
- 3.M.L. Gulka Jami, Advanced in the Dyeing and Finishing of Technical Textiles,
- Wood Head Publishing., Oxford Cambridge, Philadelphia, and New Delhi, (2013).
- 4.E-Pellow, Dyes and Dyeing, Abhishek Publications, Chandigarh (2007).
- 5. Ajay Kr. Gupta, Textile Processing with Effluent Treatment, New Delhi, (2005).
- 6. J.L. Smith, Textile Processing, Printing, Dyeing, Finishing, Abhishek Publications. (2009)
  - 7.W.S. Murphy, Textile finishing. Murphy Publications, Chandigarh (2007)

#### **Course Outcomes**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Concepts of fabric processing methods
K3	CO 2	Application of dyeson fabrics
K6	CO 3	Creation of designs for printing garments
K4	CO 4	Analyzing suitablefinishing process for different fabrics
K3	C05	Evaluate the methods of treating effluents

#### **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	<b>PO7</b>	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S) - 3Marks ModeratelyCorrelating(M)-2 marks WeaklyCorrelating(W)-1 Mark NoCorrelation(N)-0 mark

Course Code  CORE V	U21CDP43	TEXTILE DYEING AND PRINTING PRACTICAL  L T P  C C C C C C C C C C C C C C C C C C								
Cognitive level	K K K	K2: Understand K3: Apply K4: Analyze K5: Evaluate K6: Create								
Learning Objectiv	res	<ul> <li>To gain practical experience in textile dyeing</li> <li>To do value addition to products based on the dye techniques</li> <li>To enhance the fabric by applying different st printing</li> </ul>	type	of fa	bric					

- 1. Preparatory process: Cotton- Desizing, Scouring, Bleaching, Silk-Degumming
- 2. Synthetic dyeing: Cotton- Direct, reactive, Silk- Acid dye.
- 3. Printing wooden block, nail block, vegetable, finger, flock, stencil and Screen printing. Batik printing; crackled, nail block, free hand, Tie and Dye: gathering, stripes, diagonal, spiral web, trick, triangle, knotting.
- 4. Color fastness tests for dyed and printed fabrics Evaluation of colorfastness to washing, light and rubbing

#### References

#### **Text Books:**

- 1. Arora. A., Textbook of Dyes, Sonali Publications, New Delhi. (2011).
- 2. KapoorSeema, Dyeing of Textile material, Sonali Publication, New Delhi, (2012).
- 3. Niyati Bhattacharya., Natural dyes for Textiles and their ecofriendly application, IAFL Publication, New Delhi, (2010).

#### References

- 1. I.J. Grosioki., Watson's Design and Color Elementary Weaves and Figured Fabrics, Wood Head Publishing Limited, London, (2004).
- 2. Clarke, W., An Introduction to Textile Printing, Wood Head Publishing Limited, London, (2004).

#### **COURSE OUTCOMES**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Fabric preparatory processes
К3	CO 2	Demonstrate various dyeing and printing methods
K6	CO 3	Creation of design on fabrics for printing
K4	CO 4	Analyze designs and fabrics for dye and print application
K5	CO 5	Evaluate the colour fastness test of dyes fabrics

#### **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S) - 3Marks

ModeratelyCorrelating(M) - 2 Marks

WeaklyCorrelating(W) - 1 Mark

NoCorrelation(N) - 0 Mark

Course Code U21CDA44		PRIN	L	Т	P	C			
ALL	IED IV				-	4		4	
Course Code & Title	PRINCIPLES OF PATTERN MAKING								
U21TCA44	Semester-IV Credits:4 Hours:4								
Cognitive level	K2: Understand K3: Apply K4: Analyze								
Learning Objectives	<ul> <li>To enable the students to learn aboutmethod and importance of taking body measurements</li> <li>To impart knowledge on basic drafting and draping techniques</li> <li>Understand about preparation of fabric for cutting</li> <li>To enable the students to learn the skills of standardizing body measurements</li> </ul>								

#### **UnitIBody Measurements**

Body Measurements— Importance, Preparation for measuring, Girls and Ladies Measurements, Boy's and Men'smeasurements. Standardizing body measurements, Importance, Techniques used. Relative length and girthmeasurements. Preparation of standardized measurement chart.

#### **UnitIIDrafting**

Drafting – Pattern making terminology, Methods of pattern making, Types of paper patterns, Pattern making tools, Stepsindrafting bodicefront, Bodice back, Sleeve, Skirt front and back, Collar- one piece peter pan and shirt collar. Dart Manipulation, Technique-Slash and Spread method and Pivotal method. Study of commercial pattern, Merits and Demerits. Preparation of commercial pattern for kids. Fitting – Standards of a good fit, Steps in preparing a blouse for fitting, checking the fit of a blouse.

#### **UNITIIID**raping

Draping-Draping-DefinitionandMeaning,needfordraping,Importance of Draping Technique, Advantages and Disadvantages, Tools and Equipment's used for Draping, Preparation of dress form. Importance of grain, preparation of Muslin Material, straightening, tearing and pressing.

#### **UNITIVGrading and Preparation of Fabric for Cutting**

Grading and Preparation of Fabric for Cutting – Grading, Introduction and importance of grading, Manual Grading of basic bodice – front and back, Sleeve, skirt and Collar, Computerized Grading. Basic terms: Grain, Selvedge, On grain,Off Grain, Off Grain Print, With the Grain, Against the Grain, Importance of Grain in Fabric. Cutting-Preparing the Fabric for Cutting, Methods of straightening fabric ends, Methods of straightening fabric grain, shrinkingfabrics.

#### **UNIT-V** Pattern alteration and layout

Pattern alteration and layout –Importance of altering patterns, Principles for pattern alteration, common pattern alteration in blouse. Pattern layout - Definition, Purpose, Rules in layout, Types of layout and Special layouts. Piecing, transferring pattern markings, Stay and Ease stitching.

#### **References:**

#### **Text Books**

- 1. Connie Amaden Crawford., The Art of Fashion Draping, Third edition, BloomsburyAcademic, London, (2004).
- 2. Jaffe., Draping for fashion Design, Sonali Publication, New Delhi, (2012).
- 3. Khurana K, Draping and Pattern Making for Fashion Design, Sonali Publications, New Delhi. (2012).

#### **References:**

- 1. Helen Joseph Armstrong, Pattern Making for Fashion Design, Pearson Educations, New Delhi. (2013).
- 2. Zarapkar K.R, System of Cutting, Navneet Publications, India, (2005).

#### **Course Outcomes**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Method and importance of taking body measurements
К3	CO 2	Application of principle of pattern making techniques for drafting
K2	CO 3	Concept of basic draping techniques
K4	CO 4	Analyzed the methods for preparation of fabric for cutting
K4	C05	Analyzed the methods of grading pattern and pattern layout

#### Mapping of Cos with POS & PSOs:

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	M	S	S	S	S	M	M	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S) - 3Marks
ModeratelyCorrelating(M) - 2 marks
WeaklyCorrelating(W) - 1 Mark
NoCorrelation(N) - 0 mark

Course Code Skill Based E	U21CSS42 lective	COMPUTER SKILLS FOR OFFICE MANAGEMENT	L -	T 2	P	C 2
Cognitive level		Understand Apply				

Cognitive level	K2: Understand K3: Apply K4: Analysis K6: Create
Learning Objectives	<ul> <li>To gain knowledge on Functions of Operating System.</li> <li>To understand about workingof Worddocuments</li> <li>Togain knowledge about operating of spreadsheetand its applications.</li> <li>Tocreate new database and development of PowerPoint for presentation.</li> </ul>
	<ul> <li>Tounderstand about the usage of Internetandweb browser.</li> </ul>

## **Unit-I Definition of Operating System**

Functions of OS - Types of OS: Single user, Multi-User, multi-task, RTOS, Single-user, Multi-tasking – Windows Desk top - Definition of Computer – Characteristics of Computer – Working Principle of Computer – Computer Applications. Components of a Computer System - Hardware: Input devices – Output Devices – CPU: Memory Unit - Control Unit – Arithmetic Logic Unit – Storage: Internal – RAM and ROM – External Storage: Hard Disk – Compact Disk – Pen Drive – Storage Capacity: Bits and Bytes - Software: System Software – Operating System, Application Software – Windows Operating System – Booting Process - Windows Basics: Icos, Window Objects, Files, Folders- File Naming Rules – Windows Utilities: Notepad, Paint, Recycle Bin, Network, File Explorer – Users: Programmers and End-Users

## **Unit-II: Introduction to Office - Open Office - Writer**

Word - Working with Documents--Open Office writer-formatting documents-Creating Tables-Table settings, Borders, Alignments, Insertion, deletion, Merging, Splitting, Sorting, and Formula, Insertion of Objects: Equation Editor, Organizational Chart, Drawing - Inserting ClipArts, Pictures/Files etc., Tools – Word Completion, Spell Checks, Mail merge, Templates, Creating contents for books, Creating Letter/Faxes, Creating Web pages, Using Wizards, Tracking Changes, Security, Digital Signature. Printing Documents – Shortcut keys,

#### **Unit-III: Introduction to Excel**

Spread Sheet & its Applications, Opening Spreadsheet, Menus - main menu, Formula Editing, Formatting, Toolbars, Using Icons, Using help, Shortcuts, Spreadsheet types. Working with Spreadsheets-Formatting Spreadsheets-OpenOffice-Calc - Introduction - Introduction to Spreadsheets, Overview of a Worksheet, Creating Worksheet & Workbooks, Organizing files, Managing files & workbooks, Functions & Formulas, Working with Multiple sheets, Creating Charts & Printing Charts - Operating with Excel documents, which are already created and saved in Excel.

## **Unit-IV- Introduction to Access and Power point**

Access: Introduction, Planning a Database, Starting Access, Access Screen, Creating a New Database, Creating Tables, Working with Forms, Creating queries, Finding Information in Databases, Creating Reports, Types of Reports- Power point: Introduction to presentation – Opening new presentation, Different presentation templates, Setting backgrounds, Selecting presentation layouts. Creating a presentation - Setting Presentation style, Adding text to the Presentation

#### **Unit-V Internet and advanced Communication**

Internet and Web Browsers-internet browsing, searching - Search Engines - Portals - Social Networking sites- Blogs - viewing a webpage, downloading and uploading the website; Creating an email-ID, e-mail reading, saving, printing, forwarding and deleting the mails, checking the mails, viewing and running file attachments, addressing with cc and bcc-Introduction to various devices & Applications: Other than the computers, (electronic gadgets), which are widely using by executives in the Offices – Tablet, Smart Phone – concept of mobile phone and Tablet and their uses – Various applications using by Tablets and Smart Phones such as UC browser, WhatsApp, Maps, Skype, e payments.

#### **Reference Books:**

- 1. Sathish Jain, M. Geetha, Karthika, "MS-Office 2010 Training Guide", BPB Publications, (2010).
- **2.** Bittu Kumar, "Mastering MS-Office: Computer Skill Development: be Future Ready", BPB Publications, (2017).

#### **COURSE OUTCOME**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Functions of Operating System.
K3	CO 2	working of Word documents
K4	CO 3	operating of spreadsheet and its applications
K6	CO 4	Creation of new database and development of PowerPoint for presentation
K2	CO 5	usage of Internet and web browser

# Mapping of Cos with POS & PSOs:

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	M	S	S	S	M	S	S	S	M	S	S
CO2	S	M	S	S	S	M	S	S	S	M	S	S
CO3	S	M	S	S	S	M	S	S	S	M	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S)-3MarksModeratelyCorrelating(M)-2 marksWeaklyCorrelating(W)-1 Mark

NoCorrelation(N) - 0 mark

# SEMESTER-V

Course Code	U21CDT51	FABRIC STRUCTURE AND DESIGN		Т	P	С			
CORE VIII			-	5		4			
Cognitive level		K2: Understand K3: Apply K4: Analysis							
Learning Objective	es	<ul> <li>To learn about weave structure and its mecha</li> <li>To gain knowledge about the uses of different</li> </ul>			tructu	ires			

# **Unit I Woven design fundamentals**

Woven design fundamentals -Introduction, Classification of Woven structures, Methods of weave Representation, Weave repeat, basic elements of a woven design, Types of draft plans. Weaves – Plain, Rib Twill, Satin and Sateen. End uses of different weaves.

## **Unit II Heavy fabrics**

Simple fancy weaves - Honey Comb - ordinary and brighten honey Comb, its modifications. - Huck a buck weave and its modifications, Sponge weaves, Mock Leno, Crepe and corkscrew. Distorted thread effects - Bed ford cord weaves and fabrics - Enduses of honey comb and huck-a-buck weaves.

#### **Unit III Figured fabrics**

Figured fabrics - Backed Fabrics - Warp and Weft, Difference between warp and weft backed fabrics. Extra warp and extra weft figuring - single and two colors, Difference between extra warp and extra weft figuring. End uses of figured weaves.

#### Unit IVPile fabrics

**Pile fabrics -** Pile Fabric- salient features, Classification of pile fabrics -Loop, pile and cut pile, warp pile and weft pile- Types of velveteen, Weft plush -Terry pile – salient features, Classification of terry pile structures -3 pick, 4 pick, 5 pick and 6 pick - Terry Pile on one side of fabric only and on both sides.

#### **Unit V Double cloth**

Double Cloth- Introduction- Meaning —Classification of double fabric- warp, Weft and center stitched double cloth. Self-Stitched-back to Face -Difference between double cloth and double face fabrics - uses of double cloth — Applications of double cloth weaves.

## References Text Books:

- 1. Gokarneshan, N, Fabric structure and design, New Age International Publishers, New Delhi (2004).
- 2. Gokerneshan.N, Weaving Preparation Technology, Abishek Publications, Chandigarh. (2009).
- 3. Barker, A. F., Handbook of Textiles, Abhishek publications, Chandigarh. (2009).

## **References:**

- 1. SeemaSekhri, Textbook of Fabric science, Fundamentals to finishing, PHI Learning Private limited, New Delhi. (2011).
- 2.Deepali Rastogi, Sheetal Chopra, Textile Science, Orient Blacks wan Private Limited, Hyderabad. (2017).
- 3. Prabir Kumar Banerjee., Principles of fabric Formation, CRC press, U.S. (2015).

#### **COURSE OUTCOME**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Concept of fabric structures
K3	CO 2	Application of different fabric structures
K4	CO 3	Analyzing of different weaves structures from fabric samples
K2	CO 4	End uses of the weave structures
K4	CO 5	Classification and construction of fabric structure

# **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S) - 3Marks
ModeratelyCorrelating(M) - 2 marks
WeaklyCorrelating(W) - 1 Mark

NoCorrelation(N) - 0 mark

Course Code	U21CDT52		L	T	P	C		
		BASICS OF FABRIC TESTING						
CORE I	X	DASICS OF FADRIC TESTING		5		4		
Cognitive level	K2:	K2: Understand						
	K3:	Apply						
	K4:	Analysis						
	K5:	Evaluate						
Learning Objective		To learn and assess the physical and chemical parameters of fiber, yarn and fabric.						
	<u> </u>	To impart knowledge to estimate the textile quality						
		> To equip the students to evaluate the woven and knitted fabrics						

## **Unit ITesting of fibers**

Testing of fibers- Fiber length, importance of fiber length. Fiber fineness- importance of fiber fineness, Fiber maturity and its importance, Fiber strength and its importance.

## **Unit II Evaluation of yarns**

Evaluation of yarns – direct system, indirect and metric system. Yarn twist- types, importance of twist. Yarn diameter, yarn strength; single yarn strength. Yarn evenness.

#### **Unit IIIEvaluation of Woven Fabrics**

Evaluation of Woven Fabrics- Physical tests; Tensile strength, length and width, fabric thickness, fabric weight, fabric count, stiffness, drape, abrasion, pilling, crease recovery and air permeability.

# Unit IVEvaluation of Wet ability

Evaluation of Wet ability - sinking, wicking, drop, water repellency, color fastness; sunlight, washing, crocking and pressing.

## **Unit V Evaluation of Knitted fabrics**

Evaluation of Knitted fabrics - Bursting strength, GSM and color fastness properties. Dimensional stability, absorbency tests- sinking, drop test.

## **References:**

#### **Text Books**

- 1. Raul Jewel., Textile Testing, APH Publishing Corporation, NewDelhi. (2009).
- 2. Meenakshi Rastogi., Fibers and yarn, Sonali Publications, NewDelhi. (2009).
- 3. Jinlian HU, Fabric Testing, Wood Head Publishing Limited, Cambridge, England. (2008).

#### **Reference Books**

- 1. Rajesh Anandjiwala L. Hunter, Ryszard Kozlowski, Gennady Zaikov, Textiles for Sustainable Development, Nova Science Publications, Inc., New York. (2007).
- 2. Ahmed Sheraz, RasheedAbher, Afzal. A and Ahmed Faheem, Advanced Textile Testing Techniques, Taylor and Francis, US. (2017).
- 3. Wang Lijiang, Performance Testing of Textiles, Methods, Technology and Applications, Woodhead Publishing, Elsevier Ltd., USA. (2016).

#### **Course Outcome**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Methods of testing fibers
К3	CO 2	Apply the methods learnt for physical testing of fiber, yarn and fabric
K4	CO 3	Analyze the quality of fiber and yarn
K4	CO 4	Analyze the quality of fabric through various testing methods
K5	C05	Evaluation of fabric properties through fabric testing methods

# **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S) - 3Marks

ModeratelyCorrelating(M) - 2 marks

WeaklyCorrelating(W) - 1 Mark

NoCorrelation(N) - 0 mark

<b>Course Code</b>	U21CDT53			T	P	C		
		SEWING TECHNIQUES						
CORE	X		-	5		4		
Cognitive	<b>K2:</b> Understa	nd						
level	K3: Apply							
	K4: Analysis							
	K5: Evaluate							
Learning	To enab	le students to gain knowledge in sewing Machineri	es us	ed in	1			
Objectives	garment	industries.						
	> To learn	about sewing machineries and its types.						
	To study about marking, cutting and sewing process.							
	To study different types of equipment's used in apparel industry							
	> To acqu	aint students about the types of stitches used in the	indu	stry				
		<del></del>		Ū				

## **UNIT ISewing Machineries**

Sewing Machineries – Classification of sewing machines, parts and functions of single needle machine, Doubleneedlemachine –SpecialAttachments-Careandmaintenance-commonproblems and remedies. Applications of over lock machine, bar tackingmachine, Buttonhole making machine, button fixing machine, feed-of-the-arm machine, blind stitching machine, fabricexaminingmachine.

## **UNIT IIStitching Mechanism**

Stitching mechanism – Needles, bobbin and bobbin case, bobbin winding, loops and loops spreader, threading finger, upperandlowerthreading, auxiliary hooks, throatplates, takeups, tension discs – upper and lower thread tension, stitching auxiliaries, pressure foot and its types, Feed mechanisms – drop feed, different fed, needle feed, compound feed, unison feed, puller feed.

#### **UNIT IIICutting Technology**

Cutting—definition, function, scope. Cutting equipment and tools, vertical reciprocity cutting machine, rotary cutting machine, band knife cutting machine, die-cutters.

Types of spread and its quality, spreading equipment and tools used for spreading methods.

## **UNIT IVMarking methods**

Marking methods, positioning marking, types of markers, efficiency of a marker plan, requirements for marker planning. Pressing Equipment's – purpose, pressing equipment's and methods – iron, steam press, steam air finisher, steam tunnel, special types – pleating, permanent press.

#### **UNIT VSewing Federal Standards for Seam**

Sewing Federal Standards for Seam- Class 1 To 8 - Superimposed Seam, Lapped Seam, Bound Seam, Flat Seams, Decorative Stitching, Edge Neatening. Stitch Types – Class 100 to 600: Chain stitches.

#### **Text Books:**

- 1. Harold Carry and Barbara Latham., The Technology of Clothing Manufacturing, Om Book Service, New Delhi. (2010).
- 2. Dudeja, V.D, Professional Management of Fashion Industry, Gagandeep Publication, New Delhi. (2005).
- 3. Gerry Cooklin, Garment Technology for Fashion Designers, Black Well Science Ltd., Oxford. (2005)

#### **References:**

- 1. Betsy hose good, The Complete Book of Sewing, Dorling Kindersley Limited, London. (2006).
- 2. Karthik T., Ganesan P., Gopalakrishnan, Apparel Manufacturing Technology, CRC Press, U.S., (2016).
- 3. Debbie Colegrove, Sewing, Wiley Publishing, NC., Hoboken, New Jersey. (2006).

## **Course Outcomes**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Identification of different sewing machines used in apparel industry
К3	CO 2	Identification of Stitching mechanism and its operations
K4	CO 3	Analyze the garment cutting techniques.
K5	CO 4	Evaluation of the quality of marker efficiency and Pressing Equipment's
K2	C05	Sewing Federal Standards for Seam

**Mapping of Cos with POS & PSOs:** 

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	M	S	S	S
CO2	S	S	S	S	S	S	S	S	M	S	S	S
CO3	S	S	S	S	S	S	S	S	M	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	M	S	S	S

StronglyCorrelating(S) - 3Marks
ModeratelyCorrelating(M) - 2 Marks
WeaklyCorrelating(W) - 1 Mark
NoCorrelation(N) - 0 Mark

Course Code	U21CDT54	DRAPING TECHNIQUES PRACTICAL	L	Т	P	С
CORE	XI		-	5		4

Cognitive level	K2: Understand
	K3: Apply
	K4: Analysis
	K5: Evaluate
	K6: Create
Learning Objectives	
	To create patterns by draping method
	To develop skills in making patterns through draping
	To drape designs using different types of fullness

- 1. Introduction to draping and dress forms
- 2. Draping basic front and back
- 3. Draping basic skirts
- 4. Draping yokes
- 5.Draping Shirt yoke and
- 6.Draping midriff yoke
- 7. Draping collars- Peter pan
- 8.Mandarin and Shirt Collar

# **Text Book**

- 1.Khurana K, Draping and Pattern Making for Fashion Design, Sonali Publications, New Delhi. (2012)
- 2.Helen Jaffa and NurieRelis., Draping for Fashion Design, Pearson Education Inc, Prentice Hall Dorling Kinder Sley Pvt. Ltd, New Delhi., (2009).
- 3. Hilde Jaffe, Draping for fashion design, Pearson education. New Delhi (2011).

## **Reference:**

- 1.Helen Joseph Armstrong, Draping for Apparel Design, Blooms burry academic, London (2013).
- 2.Jaffe, Draping fashion Design, Sonali Publication, New Delhi. (2012).
- 3. Karolyn Kiisel, Draping: The Complete Course, Laurence King Publishing, London. (2013).

# **Course Outcome**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Draping techniques
K3	CO 2	Application of fabrics on dress form for draping.
K6	CO 3	Development of garment design using draping techniques on dress form
K5	CO 4	Evaluation of fabric properties suitable to develop design on dress form
K4	CO 5	Analysis of styles of yokes and collars for the draping shirt/garments.

# Mapping of Cos with POS & PSOs:

CO/ PO	PO1	PO 2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S) - 3Marks

ModeratelyCorrelating(M) - 2 marks

WeaklyCorrelating(W) - 1 Mark

NoCorrelation(N) - 0 mark

Course Code	U21CDP55			T	P	C					
		GARMENT CONSTRUCTION PRACTICAL									
CORE	XII	TRACTICAL	-	-	5	4					
<b>Cognitive level</b>	ŀ	2: Understand									
	ŀ	: Apply									
	ŀ	4: Analysis									
	ŀ	5: Evaluate									
	ŀ	6: Create									
Learning Objec	tives	<ul> <li>To gain practical skill in designing, drafting, properties constructing apparels for kids and adults</li> <li>To gain knowledge in calculating the material designed garments and estimate the cost.</li> </ul>									

- 1. Designing, drafting, pattern making and constructing of infant garments-Jabla with bib / Jabla with Panty.
- 2. Designing, drafting, pattern making and constructing of children garments- Shirt with / without yoke and collar / Shorts with elastic at waist and pocket, girls top and skirt.
- 3. Designing, drafting, pattern making and constructing for women's garments kameez /salwar/ Churidarand saree blouse.
- 4. Designing, drafting, pattern making and constructing for men's garments –Kurtha, Pyjama.

# References Text Books:

- 1. Anita Tyagi, Handbook of fashion Technology, Sonali Publications, New Delhi, (2012).
- 2. Winifred Aldrich, Metric Pattern Cutting for Children's Wear and Baby Wear –Black Well Publishing, New Delhi. (2012).
- 3. Zarapkar K.R., System of Cutting, Navneet Publications, India. (2005).
- 4. Gerry Cooklin, Pattern cutting for Women's outer wear, Om books international, New Delhi., (2005).
- 5. Khurana K, Draping and Pattern Making for Fashion Design, Sonali Publications, New Delhi., (2012).

- 1. Carla HegemanCrim, Pattern Cutting for Kids' Clothes, Search Press Limited, (2014).
- 2.Nancy J. S. Langdon and Sabine Pollehn, Sewing Clothes Kids Love, Creative Publishing International Inc. USA. (2010)
- 3. Samantha Me Nes., Baby Couture, K.P. Books, USA. (2005).
- 4.Jaffe, Draping fashion Design, Sonali Publication, New Delhi (2012).
- 5. Clayton, Marie, Pattern maker with Marie Clayton, make your own clothes: Twenty custom fit patterns to sew, Collins and Brown London. (2008).
- 6.Peg Couch, Garment Construction: A Complete course on making clothing for fit and Fashion, Fox Chapel Publishing. USA (2011).
- 7. Samantha., NesBaby Couture, K.P. Books, USA., (2005).
- 8. Myoungok Kim, Injoo Kim, Patternmaking for Menswear: Classic to Contemporary, Fair child Books, New York. (2014).

## **Course Outcome**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Practical skill in designing, drafting, pattern making and constructing of apparels
K6	CO 2	Creating designs and patterns for the construction of Kids, Women's and men's garments
K3	CO 3	Application of suitable fabric for garment construction
K4	CO 4	Analyzing of material requirement
K5	CO 5	Evaluation of cost of the garment

## **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	SO 1	SO 2	SO 3	SO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S) - 3Marks

ModeratelyCorrelating(M) - 2 Marks

WeaklyCorrelating(W) - 1 Mark

NoCorrelation(N) - 0 Mark

Course Code	U21CDS53	GARMENT DEVELOPMENT USING CAD			P	С
SKILL BASED ELECTIVE			-	-	2	2

Cognitive level	K2: Understand										
	K3: Apply										
	K4: Analysis										
	K5: Evaluate										
	K6: Create										
<b>Learning Objectives</b>	➤ To get familiarize with the CAD apparel software used in garment industry.										
	➤ To develop garments for kids, men and women using CAD.										
	➤ To create designs, logos and labels through CAD										
	➤ To enlighten with the knowledge of various CAD software's for designing textiles										

- **1.** Design portfolio collection theme board, mood board, color board and Swatch board.
- 2. Preparation of Patterns forthefollowing
  - Salwar and Kameez
  - Middi andTops
  - T-Shirt
  - Full SleeveShirt
  - Trousers- Narrow bottom or Bellbottom
  - **3.**Grade the following patterns for 3 sizes
    - i. Salwar and Kameez
    - ii. Middi andTops
    - iii. T-Shirt
    - iv. Full SleeveShirt
    - v. Trousers- Narrow bottom or Bellbottom

#### **Text Books:**

- 1. Alikhan, Computer Application in Textiles, Random Publications, New Delhi. (2013).
- 2.Frederick L. Chipkin., Adobe Photoshop for Textile Design, Origin Inc, New York. (2012).
- 3. Winifred Aldrich, CAD in Clothing and Textiles, Wiley, U.S., (1994).

#### **References:**

- 1. Frankie Ng and Jiu Zhou., Innovative Jacquard Textile Design using digital technologies, Woodhead Publishing, London. (2008).
- 2.Kathryn McKelvey and Janine., Munslow Fashion Design: Process, Innovation and Practice, Blackwell Science Ltd., Blackwell Publishing Company. United Kingdom., (2005).
- 3. Sandra Burke, Fashion Computing: Design Techniques and CAD, Burke Publishing, London. (2006).

#### **Course Outcome**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	CAD apparel software used in garment industry
K4	CO 2	Analysis of garment designs for kids, men and women using CAD
K6	CO 3	Create designs, logos and labels through CAD
K3	CO 4	Grading of patterns using CAD
K5	CO 5	Evaluation of Marker planning and efficiency

**Mapping of Cos with POS & PSOs:** 

	Mappii	ig of Co	19 WILLI		1008							
CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	SO 1	SO 2	<b>SO3</b>	SO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

**StronglyCorrelating(S** 

- 3MarksModeratelyCorrelating(M)-2 Marks

WeaklyCorrelating(W)

1 MarkNoCorrelation(N) - 0 Mark

Course Code	U21CDT61	EXPORT DOCUMENTATION	L	Т	P	С
CORE XIII			-	5	-	4
Cognitive level		K2: Understand K4: Analyze K5: Evaluate				

To impart knowledge on processes involved in exports.

To learn about Export Procedure and export contract

To learn about Documentation System

# **UNITIExport Business**

**Learning Objectives** 

Preliminary steps for starting export business- Meaning-Classification of goods for exports- Advantages- Disadvantages-Registration formalities-procedure for obtaining IEC number-Export license- Role of Exports Promotion Councils (EPCS) –Apparel Exports Promotion Councils (AEPC).

## **UNITHEXPORT Procedure**

Export Procedure and export contract: Steps in export procedure- pre-shipment procedure- Shipment procedure- shipment procedure. Exchange rate fluctuations Risks- Forward Contracts – Role of ECGC to cover political, Commercial and Comprehensive Risks on Exports.

## **UNITIIIExport Finance**

Arrangement of export finance: Meaning of export finance-pre- shipment finance-features-types- post- shipment finance-features- types-Institutional framework for export finance-Role of reserve bank of India in export finance.

#### **UNITIVExcise clearance**

Excise clearance -Duty Exemption, Remission, Duty drawback schemes. Quality inspection- Applications for inspection-to-inspection agencies, Inspection Certificates CRF. Certificate of origin, GSP Certificate.

## **UNITVExport Documentation**

Export Documentation: Introduction-Aligned Documentation System (ADS)-Export documentation in India-Shipping documents. Transport documents - Export promotion measures in India, Preparation of Export documents

- 1.Khushpat S. Jain., Export Import Procedures & Documentation Himalaya Publishing House, New Delhi (2011)
- 2. Francis Cherunilam., International Business: Text and cases, PHI Learning Private Ltd, (2020)
- 3. P. SubbaRao, International Business:Text and cases, Himalaya Publishing House,Mumbai, (2012)

## **Course Outcome**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Export documents in garment industry.
K2	CO 2	Procedure of garment export
K2	CO 3	Registration formalities
K4	CO 4	Analysis of duty exemption process
K5	C05	Quality inspection procedure in garment and textile industry

# **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	801	SO2	SO3	SO4	PSO5
CO1	S	S	S	S	S	S	S	S	S	M	S	S
CO2	S	S	S	S	S	S	S	S	S	M	S	S
CO3	S	S	S	S	S	S	S	S	S	M	S	S
CO4	S	S	S	S	S	S	S	S	S	M	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S) - 3Marks

**ModeratelyCorrelating(M)** - 2 marks

WeaklyCorrelating(W) - 1 Mark

NoCorrelation(N) - 0 mark

Course Code	U21CDT62	ORGANIZATION OF GARMENT UNIT		T	P	С		
CORE XI	IV		-	5	-	4		
Cognitive level		K2: Understand K3: Apply						
		K3. Apply K4: Analysis K5: Evaluate						
Learning Objective	es	<ul> <li>To impart knowledge of organizing of</li> <li>To learn about Factory Design and layor</li> <li>To develop knowledge about Institution</li> <li>entrepreneurs</li> </ul>	out					

## **UNIT-IEntrepreneurship**

Entrepreneurship- Meaning definition and types need for Entrepreneurs, qualities and types of Entrepreneurships. Difference between Entrepreneur and manager. Management- Definition, Management as a process –Planning, organizing, Directing Controlling, Coordination.

## **UNIT-II** Institutions supporting entrepreneurs

Institutions supporting entrepreneurs- Abbreviation, year of establishment and the functions of following institutions -DIC, NSIC, SISI, SIPCOT, TII, KVIC, CODISSIA, COMMERICAL BANKS -SBI. Organizational structure of a garment unit -Hierarchical organization, production planning and control.

## **UNIT-IIID**ifferent department in a garment unit

Different department in a garment unit – OrganizationalStructure of a garment unit – Design department, Finance department, purchasing department, Production department, organizing different sections – hierarchy Personnel involved in all the departments, nature of thejob.

## **UNIT-IVFactory Design and layout**

Factory Design and layout – importance of factory design, factors affecting factory design, Types of buildings, (single and Multi –story) –advantages and limitation. Factory layout – Process, Product and combined layout Design requirement – requirements relating to health, safety and welfare.

## **UNIT-VPerformance of Indian Garment Export**

Performance of Indian Garment Export, SWOT Analysis Setting up of garment unit for export market, Export Document, Export finance-types of transport and Payment method, Export shipping Role of merchandiser in a garment unit.

#### **Text Books**

- 1.Education Tally, Official guide to financial accounting using Tally ERP 9 with GST, Tally education pvt ltd, BPB Publications, (2018.)
- 2. Tally education, Tally ACE, Tally education Pvt Ltd, (2019)
- 3.Benjamin Woolf Hirsh, Peter Ellis., An Introduction to Textile Economics, Textile Trade Press, (1973)

## **Reference Books**

- 1. Tally education pvt ltd, Tally GURU Vol.2, (2019).
- 2.Anu Thomas, Startup India: Policies abound but limited impact on ground, ET online, (2017)
- 3.Bernard P Corbman, Textiles-Fiber to fabric, McGraw Hill Book Co, Singapore (1983).

## **COURSE OUTCOME**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Role of entrepreneurs
К3	CO 2	Emerge as entrepreneur with the help of Institutions supporting entrepreneurs
K4	CO 3	Process of organizing a garment unit
K4	CO 4	Analyze design and layout for a garment industry
K5	C05	SWOT Analysis Setting up of garment unit

# **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	M	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S) - 3Marks
ModeratelyCorrelating(M) - 2 marks
WeaklyCorrelating(W) - 1 Mark

NoCorrelation(N) - 0 mark

<b>Course Code</b>	U21CDT63		L	T	P	C
		GARMENTQUALITY AND COST				
CORE 2	XV	CONTROL	-	5	-	4

Cognitive level	K2: Understand K3: Apply
1 . 01. (	K4: Analysis
Learning Objectives	> To impart knowledge on quality control of raw material
	> To impart knowledge on quality specification and process
	> To understand about the types of control forms
	➤ To understand about coordinating departmental activities
	To understand about types of costs and expenses

## **UNIT IQuality control**

Definition and scope of quality control – establishing merchandising standards establishing raw material quality control specifications – quality control of raw material

## **UNIT IIQuality specification**

Establishing processing quality specification – training quality control personnel – the quality standard control – quality control inspection, procedures for processing – quality control of finished garments – quality control and government contacts – quality control for packaging, warehousing and shipping – statistical quality control. Sampling plans —wide quality standards.

## **UNIT IIIFunction of production control**

Function of production control – production analysis – quality specifications – qualitative specifications – scope of apparel manufacturing activity –coordinating departmental activities – distribution of documents and records.

## **UNIT IVType of control forms**

Type of control forms – basic production systems – principles for choosing a production a production system – evaluating production systems – flow process grids for production control –scheduling calculation, graph methods, scheduling bundles of varying amounts– producing many styles simultaneously -producing many styles consecutively in one line.

#### **UNIT VFunctions of cost control**

Functions of cost control, types of costs and expenses – apparel manufacturing cost categories – sales cost control, purchasing cost control, production cost control, administration cost control – cost ration policies – The manufacturing budget – cash flow controls.

#### **Text Books**

- 1.K. Amutha, Sustainability in the Textile Industry, Standards and Certificates, Springer Publication, (2017).
- 2.K. Amutha, Sustainable Fibers and Textiles, Sustainable Chemical Management and Zero Discharges, Woodhead Publishing, (2017).
- 3, K. Amutha, Eco-testing of Apparel Products Green Apparels, Woodhead Publishing, (2019).
- 4.Pradip V Mehta &Sathish K. Bhardwaj, Managing Quality in Apparel Industry, New Age International, (1998).

#### **Reference Book**

1.Stanley Bernard Brahams, The Fundamentals of Quality Assurance in the Textile Industry, CRC Press, (2016.)

#### **COURSE OUTCOME**

On successful completion of the course, the students will be able to gain knowledge about

K4	CO1	Analyzation of raw material quality
К3	CO 2	Quality specification and process
K4	CO 3	Types of control forms
K2	CO 4	Coordinating of departmental activities and distribution of documents and records
K3	CO 5	Administration cost control

**Mapping of Cos with POS & PSOs:** 

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	SO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

 $Strongly\ Correlating(S)\text{-}3MarksModerately\ Correlating}(M) \quad \text{- 2 Marks} \\ Weakly\ Correlating}(W)\text{-}1\ Mark \quad No\ Correlation}(N) \quad \text{- 0 Mark} \\$ 

Course Code  CORE	U21CDT64	CLOTHING CARE AND MAINTENANCE				<b>C 4</b>
Cognitive level	K3 K4 K5	2: Understand 3: Apply 4: Analyze 5: Evaluate 6: Create				
Learning Object		<ul> <li>To gain knowledge on care and maintenance of textiles.</li> <li>To acquire knowledge in differentiating types of fabrics</li> <li>To acquire knowledge on types of water and suitable laundry</li> <li>To enable and create awareness in care and maintenance of cl</li> </ul>				

#### **UNITIWater**

Water- hard and soft water, methods of softening water. Laundry soaps — Manufacture of soap (Hot process, cold process), composition of soap- types of soap- soap less detergents, chemical action, Preparation of detergent, advantagesofdetergents. Difference between soap and detergents.

## **UNITIIFinishes and reagents**

Finishes – Stiffening Agents – Starch (cold water and hot water), Other stiffening agents, Preparation of starch. Laundry blues, their application.

Laundry reagents - soaps - detergents - cleaning action of soaps, indigenous cleaning agents - ritanut - shikakai - green gram - bran solution - study of modern and industrial cleaning agents.

#### **UNITIIILaundry equipment**

Laundry equipment – for storage, for steeping and Washing – Wash board, suction washer, wash boiler, washing machine. Drying equipment's – outdoor and indoor types. Irons and ironing board – types of iron (box, flat, automatic, steam iron). Ironing board – differenttypes.

## **UNITIVPrinciples of Washing**

Principles of washing – suction washing, washing by kneading and squeezing, washing bymachine - Process details and machine details. Laundering of different fabrics – cotton and linen, woolen's, colored fabrics, silks, rayonand nylon.

# **UNITVSpecial types of Laundry**

Special types of Laundry – water proof coats, silk ties, leather goods, furs, plastics, lace. Dry cleaning – using absorbent and using grease solvents. Storing of Cloths. Stain removal – foodstains, lead pencil, lipstick, mildew, nose drops, paint, perfume, perspiration / mildew, tar, turmericand Kumkum.

#### **Text Books:**

- 1.Sushma Gupta, NeeruGarg, RenusSaini, Text book of clothing, textiles andlaundry, Kalyani Publishers, New Delhi, (2005).
- 2. Cheryl Mendelson., Home comforts- the art and science keeping house, published by Scriber, New York, (2005).
- 3. Meenakshi Rastogi., Textile and Laundry, Sonali Publications, New Delhi, (2009).

#### **References:**

- 1.Mary Humphries, Fabric References, Dorling Kindersley (India) Pvt.Ltd. Noida, UP. (2012).
- 2.Sushma Gupta, NeeruGarg, Renusaini., Text book of clothing, Textiles and Laundry, Kalyani Publishers, New Delhi. (2005).
- 3.Rajkishore Nayak, SaminathanRatnapandian., Care and Maintenance of Textile Products Including Apparel and Protective Clothing, CRC Press, U.S.A(2018).

## **COURSE OUTCOME**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO 1	Care and maintenance of textiles.
K5	CO 2	Evaluation of stain removal quality on fabrics
K4	CO 3	Distinguish hand and soft water and identify methods of softening water
К3	CO 4	Application of laundering techniques on different fabrics
K6	CO 5	Creation of care labels for use

# **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	M	S	S	S	M	M	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S)-3MarksModeratelyCorrelating(M)-2 Marks

WeaklyCorrelating(W) - 1 MarkNoCorrelation(N) -0 Mark

Course Code	U21CDP66	FASHION PORTFOLIO PRESENTATION PRACTICAL	L -	T -	P 6	<b>C 4</b>
Cognitive level  Learning Object	tives	<ul> <li>K3: Apply</li> <li>K4: Analysis</li> <li>K6: Create</li> <li>To enable students, develop a comprehensive pershowcasing their professional competencies are professional competencies and professional competencies are professional competencies and professional competencies are professional competencies.</li> <li>To enable students to develop and construct gas as per theme.</li> <li>To Design embellishments for theme-based gas are professional competencies.</li> </ul>	ds ds gn cha	lls. urt		

Portfolio development and presentation technique;

To be planned for a season or occasion

- Theme Board
- Mood Board
- Storyboard
- Colour Board
- Fabric Board
- Accessories Board
- Illustration
- Photographs

To be presented separately or in a combined form.

- Fabric development chart
- Design development chart
- Final presentation

Number of garments in a collection – 5 garments

#### **Text Books:**

- 1. Mary Mathews, Practical Clothing Construction: Designing, Drafting and Tailoring Bhattarams., Reprographics (P) Ltd., Chennai, Part-II. (2001)
- 2. Zarapkar K.R, System of Cutting, Navneet Publications India (2005)
- 3. Helen Joseph, Pattern Making for Fashion Design, Armstrong Pearson Education, Delhi, (2000).

- 1. Hilary Campbell, Designing Patterns, Om Book Services, New Delhi, (2003).
- 2. Mary Mulasi, Garments with style, Chiton Book Company, Pennsylvania, (1995).

# **Course Outcome**

On successful completion of the course, the students will be able to gain knowledge about

K4	CO1	Analyze designs for a theme.
K6	CO 2	Creation of portfolio boards
К3	CO 3	Develop chart for fabric and designs
К3	CO 4	Construct garments as per a theme.
K3	CO 5	Designing of embellishment for garments constructed

# **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S) - 3Marks
ModeratelyCorrelating(M) - 2 marks
WeaklyCorrelating(W) - 1 Mark
NoCorrelation(N) - 0 Mark

Course Code	U21CDS64	SURFACE ORNAMENTATIONPRACTICAL	L	Т	P	C
SKILL BASED PAPE			-	2	-	2

Cognitive level	K2: Understand
	K3: Apply
	K4: Analyze
	K5: Evaluate
	K6: Create
<b>Learning Objectives</b>	To impart practical knowledge of various surface ornamentation techniques
	To equip the students to analyze suitablesurface ornamentations on different products

#### 1. Introduction to surface Embellishment

Materials, Tools and Equipment's used, Design Sources, Methods of transferring designs.

# 2. Preparation of hand embroidery samples

Running, back. Chain, Feather, Stem, Fishbone, Long and short, Fly, Satin, Herringbone, Lazy-daisy, Bullion knot, French knot, seed, and Buttonhole, Ribbon embroidery.

## 3. Preparation of machine embroidery samples

Straight, Granite, Cording, Satin and Long and Short.

# **4.Preparing samples for**

Mirror, Beads, Sequins, Zardosi, Stone work, Fringes and Tassels, Laces, Smocking, Cutwork, Pompoms, Patchwork, Appliqué, Quilting, Crochet – onetechnique.

## 5. Other embellishment techniques

Drawn thread work, Knotting, Flocking and Braiding and Macramé

#### References

#### **Text books**

- **1.** NavneetKaur, Comdex Fashion Design: Fashion Concepts, Dream techpress,New Delhi,Vol-I (2010).
- 2. ManmeetSodhia., Dress Designing. KalyaniPublishers, New Delhi (2001).
- **3.** Shailaja, Surface Designing for Textile Fabrics, D. Naik Jacquie A.Wilion Publisher (2006).

#### Reference book

- 1. PremlatheMullick., Text Book of Home Science,Kalyani Publishers.New Delhi (2007).
- 2. Reader's Digest, Sewing Guide, Complete Guide for Sewing, TheReader's Digest Association Inc.,13th Edition (2004).
- 3. Dr. Paul., Traditional Indian and Textiles. Abhishek Publications, Chandigarh. (2004).
- 4. Jean Ray Laury, Applique Stitchery, Reinhold Pub.co, New York (2000).
- **5**.Cookie Lyday Sterling, Delightful projects using Easy Techniques, Country Ribbon crafts Publisher, New York (1995).

### **Course Outcome**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Materials, tools and equipment's used for surface ornamentation
К3	CO 2	Application of hand embroidery on fabric and garment design
K4	CO 3	Analyse designs for application of machine embroidery on fabric and garment design
K6	CO 4	Creation of design for surface ornamentation on fabrics
K5	CO 5	Evaluate the quality of surface ornamentation on selected designs

# **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	<b>PO7</b>	SO 1	SO 2	SO 3	SO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	M
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

**Strongly Correlating(S)** 

-3Marks

**Moderately Correlating(M)** 

-2 M arks

Weakly Correlating(W)

-1 Mark

NoCorrelation(N)

-0 Mark

# NON-MAJOR ELECTIVE

Course Code	U21CDN311	FASHION CONCEPTS	L	Т	P	C			
NM	E		-	2	-	2			
Cognitive level	K2: K3:	K1: Recall K2: Understand K3: Apply K4: Analyze							
Learning Object		<ul> <li>To impart knowledge about fashion design continuous.</li> <li>To acquaint students with current scenario of the Industry.</li> <li>To be aware of Indian Fashion designers.</li> </ul>	•		1				

## **UNIT I Meaning of Fashion**

Meaning of Fashion - Need for clothing and fashion perspectives - fashion terminologies – Fashion, Style, Fad, classic, collection, chic, custom made, mannequin, fashion, show, trend forecasting. Fabric terms and accessory terms.

#### **UNIT II Fashion Movement**

Fashion Movement - Meaning, Theories and principles- trickle up, trickle down and trickle across. Fashion - cycle, factors influencing fashion change – social, psychological, technical, Political and economic. Role of costume as a status symbol, personality and dress, clothes as sex appeal.

## **UNIT III Fashion Industry and designers**

Types of designers - classicist, idealist, influenced, realist, thinking poet. Influential designers in India - Haute couture - HemantTrivedi, J.J.Valaya, Ritu Kumar, RohitBal, TarunTahiliani, Minimalists - Himanshu and SonaliSattar, Sangeethe Chopra, Wendell Rodricks. World fashion design centers.

#### **UNIT IV Fashion Business Trends**

Fashion Business Trends - Consumer Groups, Consumer Buying Consumer market, Importance of demographics and psychographics & Niche Marketing. Fashion enterprise- fashion information services. Fashion websites.

#### **UNIT V Career in Fashion Industry**

Career in Fashion Industry - Career planning process, Training and experience needed, Career in textile, apparel, retail & fashion promotion, Entrepreneurship in fashion.

## **References:**

## TextBooks:

- 1. PoojaKhurana and Monika Sethi, Introduction to Fashion Technology, Laxmi publications, India.(2007).
- 2. Jenny Davis, A Complete Guide to Fashion Designing, First Edition, Abhishek Publications, Chandigarh (2006).
- 3. Kathryn McKelvey and Janine Munslow Fashion design process innovation and practice, Wiley Publications, NewJersey.(2012).

- 1. Anmol Roy Fashion designing and technology, Sonali Publications, NewDelhi.(2011).
- 2. Michale M. Granger Fashion the Industry and its careers, Second Edition, A division of conde Nast Publications, New York. (2012).
- 3. Dorling KindersleyFashion, The Ultimate Book of Costume and Style, Dorling Kindersley Limited,London, (2012).

## **Course Outcome**

On successful completion of the course, the students will be able to gain knowledge about

K4	CO1	Describe the fashion concepts with references to theterminology
K4	CO 2	Express the social and psychological reason for fashion changes, fashion cycle and forecasting
К3	CO 3	Outline fashion theories
K2	CO 4	Analyze the contribution of fashion designers to the world
K6	CO 5	Understand fashion business trend and identify the carrier opportunities in fashion industries

# **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	SO 1	SO 2	SO 3	SO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

Strongly Correlating (S)- 3MarksWeaklyCorrelating(W) -1 Mark

ModeratelyCorrelating(M)-2 MarksNo Correlation(N) -0 Mark

Course Code	U21CDN312	TRADITIONAL INDIAN TEXTILES	L	Т	P	С
NM	E		-	2	-	2

Cognitive level	K1: Recall K2: Understand K3: Apply K4: Analyze
<b>Learning Objectives</b>	> To understand the origin of Indian costumes
	To acquire knowledge about Indian traditional textiles and embroidery.
	> To understand the present trend in different states of India

## **UNIT 1 Study of Traditional Textiles of India**

Study of Textiles of India: Introduction, Beginning of Textiles--Traditional woven Textiles- Banaras, Brocades, Jamdanis and Baluchars of Bengal, Kani Shawls of Kashmir, Chanderi, dacca muslin.

#### **UNIT II Embroidered Textiles**

Embroidered Textiles-Salient features of each type of embroidery: colours, motifs and materials used-Kanthas of Bengal, Kasuti of Karnataka, Phulkari of Punjab, Chikankari of Uttar Pradesh, Kashida of Kashmir, Kutch, Kathiawar, Gujarat embroideries.

## **UNIT III Printed textiles**

`Painted and Printed textiles –Kalamkaris of Andhra Pradesh, Dabu printing of Rajasthan, Ajarakh prints of Gujaratand block printing.

# **UNIT IV Dyed textiles**

Dyed textiles –Introduction, history, classification-Beginning of Dyed Textiles -Type of dyed textiles -Bandhnis of Rajasthan and Gujarat, Ikats- Patola of Gujarat, Bandhas of Orissa.

## **UNIT V Status of Traditional Textiles**

Status of Traditional Textiles in Modern India - Evolution and significance of Khadi, Handloom and Handicraft sector - Interventions by government organizations.

## **Text Books:**

- 1. Parul Bhatnagar., Traditional Indian Textiles, Abhishek publications, Chandigarh., (2004).
- 2. Shailaja. D. Naik, Traditional embroideries of India, APH publications, New Delhi (2012).
- 3.Sankar K. Roy, Textile traditions of northeast India, Indira Gandhi RastriyaManav Sangrahalaya, Bhopal and orient publishers, New Delhi, (2008).

#### **References:**

- 1.Ritu Kumar, Costumes and Textiles of Royal India, Antique collectors club, India. (2008).
- 2.Carl Kohler, A History of Costume, Dover Publications, INC, New York. (2012).
- 3. John Gillow, Nicholas Barnard, Indian Textiles, Thames & Hudson, London. (2008).

## **Course Outcome**

On successful completion of the course, the students will be able to gain knowledge about

K1	CO1	Early development in textiles and costumes
K2	CO 2	Classify the traditional costumes of India
K2	CO 3	Types of traditional textiles of India
K4	CO 4	Choose and utilize traditional accessories in costumes designing
K3	C05	Choose traditional embroideries of India for garment designing

**Mapping of Cos with POS & PSOs:** 

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	<b>PO7</b>	SO 1	SO 2	<b>SO 3</b>	<b>SO 4</b>	PSO5
C <b>O</b> 1	S	S	S	S	S	S	S	S	S	M	S	S
CO2	S	S	S	S	S	S	S	S	S	M	S	S
CO3	S	S	S	S	S	S	S	S	S	M	S	S
CO4	S	S	S	S	S	S	S	S	S	M	S	S
CO5	S	S	S	S	S	S	S	S	S	M	S	S

StronglyCorrelating(S)-3MarksModeratelyCorrelating(M)-2 marks

WeaklyCorrelating(W)-1 MarkNoCorrelation(N) - 0 Mark

<b>Course Code</b>	U21CDN421			L	T	P	C	
		FUNDAMENTALS OF EMBROIDERY						
N	ME		- 2					
Course Code & Title		FUNDAMENTAI	S OF EMBROIDERY					
U21TCN421	Semester-IV	Credits:2	Hours:2					
Cognitive	K2: Understan	d						
level	K3: Apply							
	K4: Analyze							
	K5: Evaluate							
	K6: Create							
Learning	> To Enable the trainees to learn basics in embroidery.							
Objectives	➤ To impart practical knowledge in various surface ornamentation techniques							
	> To impart practical knowledge of various surface ornamentation techniques							
	> To equip the students to analyze suitable surface ornamentations on different products							
	To Enhance	. •						

#### **UNIT IIntroduction to Surface Ornamentation**

Introduction to Surface Ornamentation- and Embroidery – General rules for Hand and Machine Embroidery – Special Attachments to Sewing Machines for Embroidery – General tools-Frame, needles, thimble, Types of fabrics and Threads, Design transforming and tracing methods.

## **UNITII Hand Embroidery stitches**

Hand Embroidery stitches - Running Stitch - Laced Running Stitch - Back stitch - Stem Stitch - Satin stitch - French Knot - Bullion Knot - Cross Stitch - Blanket Stitch - Button Hole Stitch - Corel Stitch - Fly Stitch - Feather stitch - Chain Stitch - Lazy Daisy Stitch.Herringbone- Laced, doubled, closed, threaded, fish bone. Feather- Closed, doubled. Satin-Padded, shaded, long & short.

#### **UNITIII Special Decorations**

Special Decorations - Counted thread work on canvas material – Drawn Thread Work – Cut Work – Bead Work – Mirror Work – Sequins Work. Designing and producing fabric appliqués and placing it on children and women's apparel.Bead, Sequin, Stone, Mirror work, chain, appliqué mirror, cut work, zardozi.

## **UNITIVMachine Embroidery**

Machine Embroidery - Straight, Zigzag, Granite, Monogram, Carding and Couching Machine embroidery stitches using SNLS machines – running stitch, long and short stitch, cut work. computerized embroidery machines —Concepts- Special attachments.

#### **UNITVFabric Painting**

Fabric Painting – Different types of brushing techniques-Size of brush used-Outline drawing, Shading with dry and wet strokes. Stencil preparation and use of stencils to produce designs - tooth brush spraying and other creative techniques.

#### Text books

- 1. Navneet Kaur, Comdex Fashion Design: Fashion Concepts, Dream techpress, New Delhi, Vol-I (2010).
- 2...Manmeet Sodhia., Dress Designing. KalyaniPublishers, New Delhi (2001).
- 3. Shailaja, Surface Designing for Textile Fabrics, D. Naik Jacquie A. Wilion Publisher (2006).

#### Reference book

1PremlatheMullick., Text Book of Home Science, KalyaniPublishers. New Delhi (2007).

- 2. Reader's Digest, Sewing Guide, Complete Guide for Sewing, TheReader's Digest Association Inc.,13th Edition (2004).
- 3.Dr. Paul., Traditional Indian and Textiles. Abhishek Publications, Chandigarh. (2004).
- 4. Jean Ray Laury, Applique Stitchery, Reinhold Pub.co, New York (2000).
- 5. Cookie Lyday Sterling, Delightful projects using Easy Techniques, Country Ribbon crafts Publisher, New York (1995).

#### **COURSE OUTCOME**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Materials, tools and equipment's used for surface ornamentation
К3	CO 2	Application of hand embroidery on fabric and garment design
K4	CO 3	Analyze designs for application of machine embroidery on fabric and garment design
K6	CO 4	Creation of design for surface ornamentation on fabrics
K5	CO 5	Evaluate the quality of surface ornamentation on selected designs

## **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	SO 1	SO 2	SO 3	SO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	M
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S) - 3Marks

ModeratelyCorrelating(M) - 2 marks

WeaklyCorrelating(W) - 1 Mark

NoCorrelation(N) - 0 Mark

Course Code	U21CDN422	BASIC GARMENT SEWING TECHNIQUES	L	Т	P	С
NM	<b>IE</b>		-	2	-	2

Cognitive level	K1: Remember K2: Understand K3: Apply K4: Analyze
<b>Learning Objectives</b>	➤ To impart thorough knowledge on the parts and function of the sewing machine.
	➤ To enable students to gain knowledge about seams and seam finishes.
	To gain skills in sewing techniques

## **UNIT-I: Sewing Equipment and Seams**

Sewing machines- parts and their function, care and maintenance. Tools for measuring, marking, cutting and pressing. Selection of thread and needle for various types of fabric. Seams, seam finishes and hems-Definition and types.

## **UNIT II: -Fullness and Skirts**

Fullness: Definition, Types of fullness - Darts - singleand double pointed dart-Tucks - pin tuck and cross tucks. Pleat - Knife pleat, box pleat and inverted box pleat. Gathers - hand, machine, elastic, Shirring, Ruffles and flare. Types of skirts-Gathered, pleated, circular skirt.

# **UNITIII: - Plackets and Fasteners**

Fasteners – button and button hole, press buttons, hook and eyes -other types of fasteners. Plackets, importance of plackets and their types.

#### **UNIT IV: - Sleeves and Pocket**

Sleeves: - Classification of sleeves, types of sleeves- plain, puff at top, bottom, bell, bishop, circular, leg-o-mutton, sleeveless styles, Raglon and kimono sleeve. Pocket – patch pocket, set in pocket, pocket set into a seam and bound pocket.

## **UNIT V: -Neck finishing and Collars**

Neck finishes – Types of facing and binding. Collars -definition, parts of collar, factors to be considered in designing collar, classification of collar-peter pan, cape, shirt, Chinese and Shawl collar.

#### **References:**

#### **Text Books:**

- 1. Patrick John Ireland., Encyclopedia of Fashion Details, Om Books International, New Delhi. (2005).
- 2.Besty-Hose good, The Complete Book of Sewing, Dorling Kindersley Ltd., London. (2006).
- 3.Harold Carry and Barbara Latham., The Technology of Clothing Manufacture, Om Book Service, New Delhi. (2005).
- 4.Deni Bown, The Complete Book of Sewing, Dorling Kindersley Limited, USA (2003).
- 5.Connie Amaden. A Guide to Fashion Sewing Second Edition, Crawford, Fairchild Publications, USA (1994).

#### **References:**

- 1. Zarapkar K.R., System of Cutting, Navneet Publications India (2005)
- 2.Lorna Knigh, Sewing Tips, Techniques and Trade Secrets, St. Martin's Press, New York. (2010).
- 3.Karthik T., Ganesan P., Gopalakrishnan, D, Apparel Manufacturing Technology, CRC Press, U.S. (2016),

#### **Course Outcome**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Demonstrate the working mechanism of various sewing machines
K3	CO 2	Construct samples for different types of fullness
K4	CO 3	Analyze the application methods of neckline finishes, plackets and fasteners
K6	CO 4	Develop sleeves and yokes with and without fullness
K5	CO 5	Identify and apply collars and pockets in different position of the garments

# **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	SO 1	SO 2	<b>SO 3</b>	SO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	M
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

3Marks

StronglyCorrelating(S)
ModeratelyCorrelating(M)

2 marks WeaklyCorrelating(W) 1 Mark

NoCorrelation(N) 0 mark

# ELECTIVE PAPERS

<b>Course Code</b>	U21CDE311	FASHION AND CLOTHING	L	T	P	C
		PSYCHOLOGY				

ELECTIVE –I	•	4	•	3

# **UNIT IFactors influencing fashion changes**

Factors influencing fashion changes – psychological needs of fashion, social psychology of fashion, technological, economical, political, legal and seasonal influence. Role

Cognitive level	K2: Understand
	K3: Apply
	K4: Analyse
	K6: Create
<b>Learning Objectives</b>	To impart knowledge about fashion clothing Psychology
	To acquaint students with Current scenario of the Fashion Industry
	To learn about Fashion evolution
	To learn about Visual Merchandising of Fashion
	To be aware of Indian and International Fashion designers

of costume as a status symbol, personality and dress, clothes as sex appeal, cultural value Fashion cycles, repetition of fashion.

## **UNIT IIFashion evolution**

Fashion evolution – fashion cycles, length of cycles, Consumer groups in fashion cycles – fashion leaders, fashion innovators, fashion motivation, fashion victim, fashion victims, fashion followers Adoption of fashion – trickle down, trickle up and trickle across theory. Fashion forecasting – market research, evaluating the collection,

# **UNIT IIIVisual Merchandising of Fashion**

Visual Merchandising of Fashion, Types of Displays - Window displays, Interior is plays, Elements of Display - The Merchandise, mannequins & forms, props, signage, lighting. Merchandising Presentation - tools and techniques - back drop, forms, fixtures Fashion show - definition, planning, budgeting, location, timings, selection of models, collection, set design, music, preparing the commentary, rehearsal.

# **UNIT IVUnderstanding fashion designer**

Understanding fashion designer – types – classicist, idealist, influenced, realist, thinking poet. Indian Fashion Designers – Haute couture – Rohithosla, GitanjalKashyap, HemantTrivedi, J.J.Valaya, James ferrerira, Ritu Kumar, RohitBal, TarunTahiliani. Minimalists – Himanshu and SonaliSattar, Sangeethe Chopra, Wendell Rodricks Village India – BhaminiSubramaniam, Anjumodi, Indiar, Broker, Madhu Jain.Studio line – BhairaviJaikishan, Kishan Mehta, Ravi Bajaj, RituBeri, Rockys.

#### **UNIT VWorld Fashion Centers**

World fashion Centers - France, Italy, America, far east Contributions of well-known designers from France, America, Italy, Britain and Far east countries. Fashion services and resources (fashion services, colour services, video services, newsletter services, websites, directories and references), Design - historic and ethnic costume.

#### **Text Books:**

- 1.Krishna Kumar, Apparel Merchandising, Abhishek Publications, Chandigarh. (2010).
- 2. Philip Kotlar and Kevin Lane, Marketing Management, Keller Pearson Education, Inc, Delhi. (2006)
- 3. Ellen Diamond, Fashion Retailing, A Multi-Channel Approach, Pearson Education, Delhi, Second Edition, (2006).

# **References:**

- 1. Mike Easey, Fashion Marketing Black Well Publishing, Australia, Second Edition, (2005).
- 2.Jeremy A. Rosenau, David L. Wilson, Apparel Merchandising: The Line Starts Here, Fairchild books, New York, (2014).

#### **Course Outcome**

On successful completion of the course, the students will be able to gain knowledge about

K4	CO1	Analyze the factors influencing fashion changes and psychological needs
K2	CO 2	Express the psychological reason for fashion changes, fashion cycle and forecasting
K3	CO 3	Application of Visual Merchandising of Fashion
K4	CO 4	Analyze the contribution of fashion designers to the world
K6	CO5	Understand fashion business trend and creation of carrier opportunities in World fashion Centers

**Mapping of Cos with POS & PSOs:** 

	1114	JIIIE UI	COD WIL			<del>, , ,</del>						
CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	<b>PO7</b>	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	M	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	s	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

 $Strongly Correlating (S) \hbox{-} 3 Marks Moderately Correlating (M) \hbox{-} 2 Marks$ 

WeaklyCorrelating(W)-1 Mark NoCorrelation(N) - 0 Mark

Course Code	U21CDE312	BASICS OF COSMETOLOGY	L	Т	P	С
ELECTI	VE –I		-	4	-	3

Cognitive level	K2: Understand
	K3: Apply
	K4: Analyse
Learning Objectives	<ul> <li>To gain knowledge about personal grooming</li> <li>To enable the student to develop knowledge in dressing and makeup to the Etiquettes</li> <li>To help them to understand and apply the procedures for different personalities</li> </ul>

## **UNIT I Cosmetology**

Cosmetology – Introduction, Definition and its importance- difference between beautician and cosmetologist -features of a cosmetologist -Types and application- Self-grooming –definition and its importance.

#### **UNIT IIPedicure**

Pedicure, definition, need for pedicure, tools and equipment used for pedicure, step by-step procedure of pedicure-, pedicure technique- benefits - difference between spa and regular pedicure - pedicure safety.

#### **UNIT IIIManicure**

Manicure- equipment used for Manicure, Types- French, hot oil, dip power manicures- Paraffin wax treatments -shaping of nails, removal of the cuticles, Mehandi-Classical, Arabic, Glitter, Painting and Nail Art-Nail Care.

#### **UNIT IV Skin and hair**

Structure and function of skin, Skin types, skin tones, tips for skin care and steps in basic facial. Care for skin and hair-Basic Hairstyles: Knotted style - Rolling style - Plaited style- Basic structure of skin and hair, Productsavailable, skin and hair care, make up for face and hairdo styles.

# **UNIT V Face makeup**

Face makeup- meaning, make up application, Make- up types, shape and colour of Hair, hair care and hair styles for occasion.Basic Haircuts - Straight Trimming, "U" - cut and "V" - Cut.

#### Text books

- 1.Dr. NeenaKhanna, Body and Beauty Care, PustakMahal Publishers, (2011).
- 2.Rashmi Sharma, Herbal Beauty & Body Care. PustakMahal Publishers, (2011).
- 3. Richa Dave, Make-up Album, Navneet Publication, (2006).

#### Reference books

- 1. Catherine M. Frangie. Milady, Standard cosmetology, Milady Publishing Company. (2014).
- 2.Roshini Dayal, Natural Beauty Secrets from India, Tata publishing Enterprises. LLC, (2008).
- 3.P.J. Fitzgerald., The complete book of Hair styling, Mansoor book house, (2003).
- 4.Trinnywood wall, sunsannalconstantive, What Not to Wear for Every Occasion, Part-2, Orion Publishing book group, U.K, (2003).
- 5.Helena Biggs, Nail Art: Inspiring Designs, by the world's leading technician, ArcturusPublishing limited, U.S, (2014).

#### **Course Outcome**

On successful completion of the course, the students will be able to gain knowledge about

K1	CO1	Importance of cosmetology
K2	CO 2	Equipment used for pedicure, basic pedicure technique
K2	CO 3	Equipment and techniques used for Manicure
К3	CO 4	Application Face makeup- meaning, make up
K4	CO 5	Analyzation of personal grooming techniques for different personalities

# **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	M	S	S
CO2	S	S	S	S	S	S	S	S	S	M	S	S
CO3	S	S	S	S	S	S	S	S	S	M	S	S
CO4	S	S	S	S	S	S	S	S	S	M	S	S
CO5	S	S	S	S	S	S	S	S	S	M	S	S

StronglyCorrelating(S) - 3Marks
ModeratelyCorrelating(M) - 2 Marks
WeaklyCorrelating(W) - 1 Mark
NoCorrelation(N) - 0 Mark

Course Code	U21CDE313	COMPUTER APPLICATIONS IN TEXTILES	L	Т	P	C			
ELECTIVE –I		- 4 -							
Cognitive level	K2: Understand K3: Apply K5: Evaluate K6: Create								
Learning Object	>	<ul> <li>To understand the basics of computer and its applications</li> <li>To acquire knowledge about the latest software</li> <li>To impart knowledge of CAD in fashion designing</li> </ul>							

# **UNIT-IComputer**

Classification of computers, computer generations, computer specification, organization of computer sections. Types of storage devices (primary and secondary), input devices, output devices.

# **UNIT-II Computers in Textile and Apparel**

Role of Computers in Fashion Industry - Information flow- CAD, CAM, C.IM, CAA, PDC - Definition and functions, Computers in production planning and production scheduling, computerized colour matching system

# **UNIT-III Creating styles using Corel Draw**

Creating styles using Corel Draw: Significance of the software, tools used for designing, steps in creating a logo, letter head, visiting card, envelope, care label.

# **UNIT- IV** CAD in Pattern Making and Grading

CAD in pattern making and grading - system description - information flow – process involved in pattern making, process involved in pattern grading.

# **UNIT-V CAD in Garment Design**

Computer application in fabric defect checking, laying / spreading, cutting marker planning, labelling - parts and functions. Computerised sewing machines.

# **References:**

#### **Textbooks:**

- 1. Alikhan., Computer Application in Textiles, Random Publications, NewDelhi. (2013).
- 2. VasugiRaaja. N., Computer Application in Apparel Industry, PranavPublication, Tiruchengode, Tamil Nadu. (2011).
- 3. A. D. Sule, Atira, Computer Colour Analysis: Textile Applications, NewAgeInternational,India (1997).

- 1. Frederick L. Chipkin, Adobe Photoshop for Textile Design, Origin Inc, New York. (2012).
- 2. Frankie Ng and Jiu Zhou Innovative Jacquard Textile Design using digital technologies, Woodhead Publishing, London., (2008).
- 3. Kathryn McKelvey and Janine Munslow, Fashion Design: Process, Innovationand practice, BlackWell Science Ltd., Blackwell Publishing Company, UnitedKingdom (2005).

# **Course Outcomes**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Basics of computer and its applications
К3	CO 2	Application of software's used in the fashion industry
K2	CO 3	Uses and functions of Coral draw, TUKA studio and pattern making and adobe photoshop
K6	CO 4	Creation of designs using the software's
K5	C05	Evaluate the efficiency of the marker planning

Mapping of Cos with POS & PSOs:

map	Mapping of Cos with FOS & FSOs:													
CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5		
CO1	S	S	S	S	S	S	S	S	S	S	S	S		
CO2	S	S	S	S	S	S	S	S	S	S	S	S		
CO3	S	S	S	S	S	S	S	S	S	S	S	S		
CO4	S	S	S	S	S	S	S	S	S	S	S	S		
CO5	S	S	S	S	S	S	S	S	S	S	S	S		

StronglyCorrelating(S)-3MarksModeratelyCorrelating(M)-2 Marks

WeaklyCorrelating (W)-1 MarkNoCorrelation(N)

-0 Mark

Course Code	U21CDE421	FASHION FORECASTING	L	Т	P	C				
ELECTIVE-II			-	3	•	3				
<b>Cognitive level</b>	K1:	Recall								
	K3:	3: Apply								
	K4:	K4: Analyse								
	K6:	Create								
Learning Object	tives	To enable the students to understand about fashio	n fra	amev	vork	s.				
	>	> To develop a holistic understanding of fashion trend								
		setting.								
	<b>&gt;</b>	To increase their abilities in applying forecasting skills								

#### UnitIIntroduction

Introduction- Meaning of Fashion, Meaning of Fore Casting, the Role of a Forecasting, Types of Forecasting-Colour Forecasting, Textile Forecasting, Styling Forecasting, Sales Forecasting, Accessories Forecasting, Fabric Forecasting.

# **UnitIIProcess of Fashion Forecasting**

Process of Fashion Forecasting- Process Diffusion of Innovation, Long term forecasting, short term forecasting, Difference between Long term and short-term forecasting, the precision of fore casting Responsibilities of trend forecasting.

# **UnitIIIForecasting trend and Culture**

Forecasting trend and culture -Contemporary Culture, Street Influence, Celebrity Culture, thenewgatekeepers of fashion, Range building with trends, Trend prediction for a customer base Fabric Fairs, Consumer Research, and Trend in Colour forecasting.

#### **Unit IV Fashion communication**

Communicate creative concepts effectively - Communicate visually through roughs, boards and illustrations, communicate using industry standard terminology, software to communicate a design solution.

# **Unit VProcess of Reporting**

Process of Reporting- process of implementation, promotion, making the fashion happen, Steps in fashion forecasting- Hunt, Identify, Gather.

#### **Text books**

- 1. E. L, Fairchild Fashion Forecasting Brannon Publications, III Edition. New York, (2005).
- 2. McCelvey Kathryn and Maslow Janine, Fashion forecasting. Wiley-Blackwell. (2008).
- 3. RaymondMartin, The TrendForecastersHandbook, Laurence'sking, U.K, (2010).

#### Reference books

- 1. Cynthia l. regan, Apparel Product Design & Merchandising Strategies, New Jersey Pearson Prentice Hall, NewDelhi (2007).
- 2. Hethorn, J, &Lukasiewicz, Sustainable Fashion: Why Now, Fairchild Publications, New York, (2008).

# **Course Outcomes:**

On successful completion of the course, the students will be able to gain knowledge about

K1	CO1	Remembering the trend forecasting terminologies
K3	CO 2	Communication using industry standard terminology
К3	CO 3	Application software to communicate a design solution
K4	CO 4	Analyzation of the Process of Fashion Forecasting
K6	CO 5	Analyzing the past and present influences and forecast Future fashion

# Mapping of Cos with POS & PSOs:

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S) - 3Marks

**Moderately Correlating (M)** - 2 Marks

WeaklyCorrelating(W) - 1 Mark

NoCorrelation(N) - 0 Mark

Course Code	U21CDE4	122		L	Т	P	С			
ELECTIVE-II			FASHION COMMUNICATION	-	3	-	3			
Cognitive level K2:			Understand							
	I	<b>K3:</b> <i>A</i>	Apply							
	I	K4: A	Analyse							
	I	K5: 1	: Evaluate							
Learning Object	etives		> To the Students with effective communication tools required in							
			the Fashion business							
			To acquire the skills for effective communication.							
		>	To enable students to gain knowledge about the opportunities in fashion industry							

#### **UnitIIntroduction to communication**

Introduction to communication – process of communication, importance of communication, types of communication- Verbal Communication, Non- verbal / Interpersonal communication, Written Communications, Formal & Informal and Visual Communication.

# **UnitIIFashion Journalism**

Fashion Journalism — Introduction, Career information, fashion journals, responsibilities of a fashion journalist, ethics. Photography-Introduction, Fashion photography, Careerinformation, qualities and responsibilities, ethics.

#### **UnitIIIFashion Show**

Fashion show- types of fashion shows- Couture Shows, Ready-to-wearShows, TradeShows, Trade Association Shows, Press Shows, Fashion Trend Shows and In-StoreTraining Shows. Steps to organize Fashion Show, fashionweek.

#### **UnitIVFashion Advertisement**

Fashion Advertisement – Introduction, Definition, Features, Objectives and importance of advertising, Types of Advertisement - Print Advertising, Outdoor Advertising, Broadcast advertising, Covert Advertising, Surrogate Advertising, Public Service Advertising, Celebrity Advertising.

# **UnitVEvent Management**

Event Management – Event definition, event manager, role of eventmanager, Steps involved in event planning – event planning, event promotion, event production, copy writer and visualization.

#### Reference

- 1. Jenny Davis, Fashion Lifestyle Communication. Abhishek Publications, (2008).
- 2. SuparnaDutta., Business Communication, PHI Laring Pvt. Ltd, New Delhi: (2013).
- 3. Juliette Cezzar, The AIGA guide to careers in graphic and communication design, Law point publication. (2000).
- 4. Jin, Byoungho, Cedrola, Fashion Branding and Communication, Palgrave Macmillan, New York (2017).
- 5. Glenn Bowdin, Johnny Allen, Rob Harris, Events Management. Butterworth-Heinemann Publication, New York, (2017)
- 6. Helen GoWorek, Careers in Fashion and Textiles, John Wiley Sons, Publishing, (2007).
- 7. John V. Thill, Courtland L, Bovee, Excellence in Business Communication, Prentice hall, (1999).

# **Course Outcomes:**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Communication in Fashion industry.
K2	CO 2	Concept of Fashion Journalism
К3	CO 3	Organization of Fashion and trade shows
K4	CO 4	Analyzing various medias for correct fashion Advertisement
K5	CO 5	Evaluation of event management

#### **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	S	S	S	S	S	S	S	S	S	M	S	S
CO2	S	S	S	S	S	S	S	S	S	M	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	M	S	S
CO5	S	S	S	S	S	S	S	S	S	M	S	S

StronglyCorrelating(S)-3MarksModeratelyCorrelating(M)-2 MarksWeaklyCorrelating(W)-1 MarkNoCorrelation(N)-0 Mark

Course Code	U21CDE422	FASHION ACCESSORIES	L	Т	P	C		
ELECTIVE-II		PASITION ACCESSORIES	-	3	-	3		
Cognitive level	K3: A K4: A	K2: Understand K3: Apply K4: Analyze K6: Create						
Learning Objects	availab To und	To impart knowledge about the significance of accessories and styles available To understand the history of fashion accessory To enable them to understand about care for skin and hair						

# **Unit IIntroduction to Accessory**

Introduction to accessory- Definition, History - Classification of fashion accessories - Head gears, Footwear, Neck wear, Belts, Hand bags, Gloves, Scarves, Stoles, Stocking and Sun glasses- Current trends in fashion accessories - Comparison of historical and current fashion accessories.

# **Unit IIBags and Belt**

Bags and Belt- History, significance, top brands, anatomy, Classification,raw materials used in making bags and belts. Fashion using bags and belt. Factors involved in selection of bags and belt – different types of bags and belts for women,

# **Unit IIIFootwear and hosiery**

Footwear and hosiery: Footwear: History, types, materials used, anatomy of shoe, styles of footwear for men and women, Types of heels, types of foot styles in footwear. Problems with foot wear-blisters and foul odor – remedy. Factors to remember while selecting footwear. Fashion using footwear, care for footwear. Hosiery: Socks, stockinet, Panty hose – styles, care and fashion usinghosiery.

#### **Unit IVMinor Fashion accessories**

Minor Fashion accessories: Glove and scarf: History, materials used, styles available, fashion using gloves and scarf, care and maintenance.

Hats, Umbrellas – History component parts, size and construction, style and care.

Watches and Eyewear: Introduction, parts, fashion, suitability based onbody (watches) and face type (eyewear) and care

#### **Unit VJewelry and fragrance**

Jewelry and fragrance: History, significance, types of jewelry – traditional and latest styles of jewelry for men and woven - Major and minor jewelry types.

Fragrance-Meaning – importance- types - fragrance for men and women – branded perfumes.

## **TextBooks:**

- 1. Eileen Figure Sandlin, Start your own fashion, Accessories Business, Entrepreneur press, Canada. (2009).
- 2. Olivier Gerval, Fashion Accessories, A and C Black Publishing's, GreatBritain, (2009).
- 3. Diamond Jay, Fashion Apparel, Accessories and home Furnishings, Pearson Education India, NewDelhi. (2008).

# **References:**

- 1. Phyllis Tortora,. Encyclopedia of Fashion Accessories, OM books international, New Delhi. (2005)
- 2. NirupamaPundir, Fashion technology today's and tomorrow, A Mittal publication, New Delhi, (2007).

#### **Course Outcomes**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Different types of bags, belts, shoes and other accessories
K4	CO 2	Analyze the raw materials used and styles for men and women
К3	CO 3	Use of selected fashion accessory for a specific theme
K6	CO 4	Creation of designs in jewellery and other fashion accessory
K2	CO 5	Various methods for skin and hair care

# **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S)
Moderately Correlating(M)
WeaklyCorrelating(W)NoCorrelation(N)

3Marks2 Marks1 Mark

- 0 Mark

Course Code	U21CDE531	TEXTILES AND COSTUMES OF INDIA	L	Т	P	С		
ELECTIVE - III		TEATILES AND COSTONES OF INDIA	-	3	-	3		
Cognitive level	K2: U K3: A	Recall Understand Apply Analyse						
Learning Object	>	<ul> <li>To understand the origin of Indian costumes</li> <li>To acquire knowledge about Indian traditional textiles and embroidery.</li> </ul>						

# **Unit I History of costumes**

Introduction; Beginning of costume- Body decorations, body staining, tattooing, cutting and scarification; Clothing of different periods- Egyptian costumes, Ancient costumes and developments during various periods. Factors affecting early costumes, Sources and Types of early costumes.

#### **Unit IICostumes and Accessories of East and West**

Men's attire, women's attire; upper wear, bottom wear and accessories used in different states; Gujarat, Madhya Pradesh, Rajasthan, Orissa, West Bengal, Manipur, Assam, Haryana and Maharashtra, Nagaland, Bihar.

## **Unit IIICostumes and Accessories of South and North**

Men's attire, women's attire: upper wear, bottom wear and accessories used in different states: Tamil Nadu, Kerala, Andra Pradesh and Karnataka, Jammu and Kashmir, Punjab, Himachal Pradesh, Uttar Pradesh.

# Unit IVTraditional Woven, Dyed and Printed Textiles of India

Woven textiles- Dacca Muslin, Jamdani, Chanderi, Brocades, Balucher, Kashmir shawls-colour, motifs, techniques and materials used. Dyed and Printed textiles- Bandhani, Patola, Kalamkari and Block printing – colour, motifs, techniques and materials used.

# Unit V Traditional Embroidery of India

Salient features of each type of embroidery: colours, motifs and materials used. Phulkari, Chikankari, Kantha, Kutch, Kathiawar, Sindh, Kasuthi and ChambaRoomal.

#### **Text Books:**

- 1. Parul Bhatnagar., Traditional Indian Textiles, Abhishek publications, Chandigarh., (2004).
- 2. Shailaja. D. Naik, Traditional embroideries of India, APH publications, New Delhi (2012).
- 3.Sankar K. Roy, Textile traditions of northeast India, Indira Gandhi RashtriyaManavSangrahalaya, Bhopal and orient publishers, New Delhi, (2008).

#### **References:**

- 1. Ritu Kumar, Costumes and Textiles of Royal India, Antique collectors club, India. (2008).
- 2. Carl Kohler, A History of Costume, Dover Publications, INC, New York. (2012).
- 3.John Gillow, Nicholas Barnard, Indian Textiles, Thames & Hudson, London. (2008).

#### **COURSE OUTCOME**

On successful completion of the course, the students will be able to gain knowledge about

K1	CO1	Early development in textiles and costumes
K2	CO 2	Classify the traditional costumes of India
K2	CO 3	Types of traditional textiles of India
K4	CO 4	Choose and utilize traditional accessories in costumes designing
K3	C05	Choose traditional embroideries of India for garment designing

# **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	M	S	S
CO2	S	S	S	S	S	S	S	S	S	M	S	S
CO3	S	S	S	S	S	S	S	S	S	M	S	S
CO4	S	S	S	S	S	S	S	S	S	M	S	S
CO5	S	S	S	S	S	S	S	S	S	M	S	S

StronglyCorrelating(S) - 3Marks

Moderately Correlating (M) - 2 Marks

WeaklyCorrelating(W) - 1 Mark

NoCorrelation(N) - 0 Mark

Course Code	U21CDE532		L	T	P	C
ELECTIVE - III	[	INDIAN TEXTILE INDUSTRY	-	3	-	3

Course Code & Title			
	Semester-V	Credits:3	Hours:3
Cognitive level	K2: Understand K3: Apply K4: Analysis	l	
Learning Objectives	Indian Text  To import k	•	and Development of tions related to the

# **UNIT I Indian textile and Apparel Industry**

Introduction to Indian textile and Apparel Industry –Origin -History- market size - structure of Indian textile industry –Composite mills, spinning, weaving and knitting, fabric finishing, apparel.

# **UNIT II Textile Industry Growth**

Growth and Development of Indian Textile Industry -Government Initiatives - opportunities and strength -current facts on Indian textile Industry-Indian imports and export - Global scenario of textile industry.

#### **UNIT IIICategories of textile industry**

Categories of textile industry - Cotton, Wool, Silk, Rayon, Man-Made Textiles, Readymade garments industry, Hand crafted textiles, jute and coir -introduction and market size. Five-year plans for the textile Industry - Recent plan and previous 5 Five-year plans - Organizations related to the Textile and clothing Industry -Concept of GATT, MFA, WTO.

# **UNIT – IVFiber and Yarn Industry**

Technological developments in Fiber Industry- Natural and Man-made Industry-production- Significance. Technological developments in Yarn Industry- Fabric Industry -woven, knitted, nonwoven - significance and uses. Garment Industry - developments, significance and uses.

#### **UNTT -V Printing and Dyeing Industry**

Traditional approach of dyeing and printing industry - Technological developments - significance and uses - centers of traditional printing in India - Technological developments in Processing Industry, significance and recent trends.

#### Reference

#### **Text Books**

- 1.Benjamin Woolf Hirsh, Peter Ellis, An Introduction to Textile Economics, Textile Trade Press, (1973).
- 2.Pradip V Mehta &Sathish K. Bhardwaj., Managing Quality in Apparel Industry, New Age International, (1998).
- 3.K.Amutha, Sustainability in the Textile Industry, Standards and Certificates, Springer Publication (,2017).
- 4.K. Amutha Sustainable Fibers and Textiles, Sustainable Chemical Management and ZeroDischarges, Woodhead Publishing, 2017.
- 5.K. Amutha., Eco-testing of Apparel Products, Woodhead Publishing, Green Apparels, (2019).

#### **Reference Books**

- 1.Anu Thomas, Startup India: Policies abound but limited impact on ground, ET online, (2017)
- 2.Bernard P Corbman, Textiles-Fiber to fabric, McGraw Hill Book Co, Singapore, 6th edition, (1983).

### **COURSE OUTCOME**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Origin, Growth and Development of Indian Textile Industry
K2	CO 2	Five-year plans for the textile Industry
К3	CO 3	Technological developments in Fiber Industry
K4	CO 4	Analyze technological developments in Fabric Industry
K4	CO 5	Technological developments in Printing and Dyeing Industry

# **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S) -3MarksModeratelyCorrelating(M) -2 Marks

WeaklyCorrelating(W) -1 MarkNoCorrelation(N) -0 Mark

<b>Course Code</b>	U21CDE533		L	T	P	C
		KNITTING	-	3	-	3
ELECTIV	VE - III					

Cognitive level	K2: Understand
	K4: Analyse
	K5: Evaluate
Learning Objectives	<ul> <li>To enable students to gain knowledge about knitting machines.</li> <li>To acquire knowledge about knitted fabrics and care</li> <li>To understand the classification of knitting</li> </ul>

### **Unit I-KnittingIndustry**

History-Definition -Scope of knitting in garment manufacturing -growth of knitting industry – market share of knitted apparels in India – Global market - threats in knitting industry – competition between Indian knitwear industry and global brands.

# **Unit II Knitting**

Definition – Meaning – Knitted fabric features -Basic concepts of knitting- Difference between knitted and woven fabrics. Ccharacteristics required for knitted yarn- Knitted loop structure – types of loops, Wales, course and stitch density.

## **Unit IIIKnittingMachine**

KnittingMachine - The main features of the knitting machine -weft knitting machines -Circular knitting machine (single and double), Flatbed knitting machine, fully fashioned knitting machine, and Hosiery knitting machine. Warp knitting machines - Tricot knitting machine, and Raschel knitting machine. Knitting needles- Types – latch, spring beard and compound needle.

# **Unit IV Classification of knitting**

Classification of knitting - Warp knitting and weft knitting - Warp knitting - Tricot and Raschel-Weft knitting-Flat and Circular. Weft and warp knitting- characteristics.

Types of knitted fabrics- Weft knits- single knits- single jersey, Lacoste- double knits- Plain knitted fabrics, rib, purl, inter lock, cable, birds' eye – special weft knits – jacquard, terry, fleece, sliver – Warp knits- Tricot and Raschel.

# **Unit VCategories in knitted apparels**

Knitting industry – categories of apparel – Knit wear, knitted outer wear, intimate apparel, hosiery/ socks, sports and active wear, swim and beach wear, knitted accessories, house hold, technical textiles. Potential benefits of seamless garment knitting.

#### References

#### **Text Books**

- 1. Seema Kapoor, Modern Knitting Technology, Sonali Publications, New Delhi. (2012).
- 2.Parmar M, Knitting, Random Publications, New Delhi. (2013).
- 3. Naik, Weaving and Knitting Technology, APH Publications, New Delhi. (2013).

- 1.Ray, Fundamentals and advances in Knitting Technology, Woodhead Publications. United Kingdom. (2011).
- 2. Anbumani N, Knitting Fundamentals, Machines, Structures and Developments, New Age Publications, New Delhi. (2007).
- 3.David.J. Spenser, Knitting Technology, Limited, Oxford Wood Head Publishing Cambridge, New Delhi, Philadelphia. (Reprinted 2011).

# **COURSE OUTCOME**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Understand knitting terminologies
K4	CO 2	Features of knitting machine and compare types of knitting needles
K2	CO 3	Classification of knitting
K5	CO 4	Evaluate different types of finishes given to knitted fabric
K4	C05	Analyze different methods of maintaining knitted fabrics

# Mapping of Cos with POS & PSOs:

CO/ PO	PO1	PO2	PO3	PO4	PO 5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S)-3MarksModeratelyCorrelating(M)

2 Marks

WeaklyCorrelating(W)-1 MarkNoCorrelation(N)

0 Mark

Course Code U	U <b>21CDE641</b>		L	T	P	C
ELECTIVE	E - IV	APPAREL MARKETING	-	3	•	3

Cognitive level	K2: Understand
	K3: Apply
	K4: Analyse
	K6: Create
<b>Learning Objectives</b>	To impart the knowledge on the Apparel marketing strategies.
	To impart the knowledge on Marketing Function, Pricing policies and
	strategies for apparel products

#### **UNIT-IMarketing**

Meaning and classification of Marketing, fashion Marketing, fashion Market – Size and structure, Marketing environment – Micro and macro marketing environment, Trends in marketing environment.

# **UNIT-IIMarketing Function**

Assembling, standardization and Grading and packaging, product planning and development, importance of fashion products, Nature of fashion products. The fashion industry and new product development, product mix and range planning, Fashion and related cycles.

#### **UNIT-IIIPricing policies and strategies**

Pricing policies and strategies for apparel products, importance of price policies, Functions and factors Influencing pricing- internal and external, pricing strategies for new products, methods of setting prices.

# **UNIT-IVSales promotion**

Fashion sales promotional programme for apparel marketing, communication in prop motion, Personal selling, point of purchase, sales promotion – Objectives and methods, Marketing Research – Definition, Scope and Process – Areas of research.

# **UNIT-VFashion Advertising**

Fashion Advertising and preparation of advertising for apparel market, Advertising media used

in apparel market – Advantages and limitations, Advertising department – structure and functions, advertising agencies – structure and functions. Advertising Budget

#### **References:**

## **Text Books:**

- 1.Krishna Kumar.M, Apparel Merchandising, Abhishek Publications, Chandigarh. (2010)
- 2.Philip Kotlar and Kevin Lane, Marketing Management, Keller Pearson Education, Inc, Delhi. (2006).
- 3. Ellen Diamond, Fashion Retailing, A Multi-Channel Approach, Pearson Education, Delhi. (2006).

1.Mike Easey, Fashion Marketing, Black Well Publishing, Australia. (2005)

2.Jeremy A. Rosenau, David L. Wilson, Apparel Merchandising: The Line Starts Here, Fairchild books, New York, (2014).

# **COURSE OUTCOME**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Fashion marketing and Marketing environment
K2	CO 2	Functions of fashion Marketing
K4	CO 3	Analyzation of pricing policies and strategies for apparel products
K3	CO 4	Application of sales promotional programme for apparel marketing
K6	C0-5	Creation of Fashion Advertisements

# Mapping of Cos with POS & PSOs:

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	M	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	M	S	S
CO5	S	S	S	S	S	S	S	S	S	M	S	S

StronglyCorrelating(S)-3MarksModeratelyCorrelating(M) - 2 Marks

WeaklyCorrelating(W)-1 MarkNoCorrelation(N) - 0 Mark

<b>Course Code</b>	U21CDE642		L	Т	P	C
		BASICS OF NON-WOVEN	-	3	-	3
ELECTIV	VE - IV					

Cognitive level	K2: Understand K4: Analyse
	K5: Evaluate
<b>Learning Objectives</b>	
	➤ To acquire knowledge about types of non – woven fabrics
	> To acquire knowledge on evaluation of non- woven fabrics
	> To acquire the capacity to differentiate non-woven structures

## **Unit I Nonwoven Industry**

Meaning of Nonwoven–developments in nonwovens – current trends and opportunities for nonwovens –nonwovens moving toward sustainability –nonwovens from disposable to reuse - Durable nonwoven fabrics – structures with super moisture transport, high strength micro and nanofiber structures.

#### **Unit IINon-woven structure**

Non-woven structure – Introduction, Definition, Classification of nonwoven - Advantages and disadvantages of non-woven -properties – machineries used - Applications of nonwovens.

#### **Unit IIINon-woven web formation**

Nonwoven fabric web – types - staple fiber web – dry-laid webs and wet-laid web,- continuous filament web- spun laid web and melt blown web. Web formation-Blending, opening, and carding.

## **Unit IV Non-woven web Bonding techniques**

Mechanicalbonding – Needle punch -spun laced, stitch bonded, hydro entanglement -Thermal bonding -Calendaring, through air bonding, ultrasonic bonding, radiant heat – Chemical Bonding – saturation adhesive, foam coating, application of powders, spraying, print bonding.

# **Unit VNonwoven processand product categories**

Mechanical bondingProcess - product categories - Felt, geotextiles, blood filters, synthetic leather, blankets, automotive interior trim, carpets.

Thermal bonding - process - product categories -upholstery, cushion pads, heat insulation, sound insulation, medical insulation, protective wrapping material.

Chemical Bonding – process- product categories- Acrylic weatherability roofing, PVC copolymers and seating materials for automotive.

- 1. SeemaSekhri, Textbook of fabric science: Fundamental to finishing, PHI LearningPvt.Ltd. NewDelhi.(2011).
- 2. MeenakshiRastogi, Textile Forming, Sonali Publications, NewDelhi.(2009).
- 3. S J Russell, Handbook of Nonwovens, Wood head Publishing, UK. (2006).

#### References

- 1. Chapman R., Application of Non-woven's in Technical Textiles, Taylor and Francis's publisher, UK. (2010).
- 2. Irwin Marshall Hutten., Handbook of Non-Woven Filter media, Elsevier publisher, Netherland. (2007).
- 3. Stephen J. Russell., Handbook of Non-Woven, CRC Press publisher, England. (2007).

#### **COURSE OUTCOME**

On successful completion of the course, the students will be able to gain knowledge about

K2	CO1	Classify the types of nonwovens
K2	CO 2	Manufacturing process of nonwovens
K4	CO 3	Compare the features of different bonding methods
K4	CO 4	Analyse different nonwoven structures based on their types
K5	C05	Assess the quality of nonwovens on different parameters

# **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S)-3MarksModeratelyCorrelating(M) - 2 Marks

WeaklyCorrelating(W)-1 MarkNoCorrelation(N) - 0 Mark

Course Code	THE CONTRACT		L	T	P	C
	U21CDE64					
ELECTIV	VE - IV	ECO FASHION	-	3	•	3

Cognitive level	K2: Understand K3: Apply
Learning Objectives	<ul> <li>To understand the need for eco concepts in fashion.</li> <li>To outline the eco-friendly methods in fashion goods manufacturing</li> <li>To understand about eco fashion designers</li> </ul>

#### Unit I Eco fashion

Introduction, carbon footprint, Eco fashion terminologies- Eco, Sustainable, Ethical, Vegan, Craft/ artisan, Eco green, up cycling. Eco initiatives- types. Popularity of eco fashion. The rise of consciousconsumerism.

#### Unit II Eco fashion labels

Eco labels -Definition, Origin, Need and Scope of eco label, Benefits of eco label, Eco labeling schemes, Types of eco label and products covered. Certification terminologies- Fair trade, Global organic textile standard,

#### **Unit III Eco fibers and fabrics**

Eco fibers and fabrics – Organic cotton, Hemp, Bamboo, Linen, Organic wool, pashmina silk, Soy silk. Eco-mark- Definition, Types of eco mark for fabrics: Silk mark, Handloom mark.

# Unit IV Eco fashion designers and brands

Eco fashion designers- Lucy Tamman, Ryan Jude Novelline, MeghnaNayak, AneethaArora. Brands- Doodlege, pero, Ka-sha, Bhusattava, Forty red bangles, Anokhi, Upasana, Ethicus- aim, collections and promotions. Big labels like Fab India.

# Unit V Reuse and Recycle

Textile waste and Up-cycling - Three R's of recycling- Reduce, Reuse, Recycle.Methods of recycling technologies and repurposing of used clothing, fashion brands that use recycled textile materials.

#### TextBooks:

- 1. Rose Sinclair, Textile and Fashion materials, Design and Technology, Wood head publications, London. (2015).
- 2. Miraftab.M, Horrocks. A. R, Eco Textiles the Way Forward for Sustainable Development in Textiles, Wood head publications, London. (2007).

#### **References:**

- 1. Subramanian, SenthilKannan, Muthu, Sustainable Innovations in Textile Fibers, Springer publications, Singapore. (2018).
- 2. Thomas and Hudson, The Sustainable Fashion Handbook, Sandy Black's publishers, London. (2012).
- 3. Jennifer Farley Gordon, Collean hill, Sustainable fashion: Past, Present and Future, BloomsburyPublishing, London. (2014)

#### **COURSE OUTCOME**

On successful completion of the course, the students will be able to gain knowledge about

K4	CO1	Analyse the need for eco- fashion market
K4	CO 2	Eco - labeling in categorizing textile goods
К3	CO 3	Application of eco- friendly materials in fashion
K2	CO 4	Eco- fashion designers and their contribution
K6	CO 5	Methods of up- cycling textiles

# **Mapping of Cos with POS & PSOs:**

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3	PSO 4	PSO5
CO1	S	S	S	S	S	S	S	S	S	S	S	S
CO2	S	S	S	S	S	S	S	S	S	S	S	S
CO3	S	S	S	S	S	S	S	S	S	S	S	S
CO4	S	S	S	S	S	S	S	S	S	S	S	S
CO5	S	S	S	S	S	S	S	S	S	S	S	S

StronglyCorrelating(S)-3MarksModeratelyCorrelating(M) - 2 Marks

WeaklyCorrelating(W)-1 MarkNoCorrelation(N) - 0 Mark

# VALUE ADDED COURSE

Course Code & Title		AARI EMBROI	DERY
U21CDV51	Semester-V	Credits:2	Hours:30
Learning Objectives	<ul><li>Design and</li><li>Get well tra</li><li>Develop was</li><li>embroidery</li></ul>		rty wears, garments ery nd other products using Aari

Module	Course Content - Practical / Project / Internship	Hours
Module 1	Punching, Design Transforming and Tracing methods	4 hours
Module 2	Basic Stitches for Hand Embroidery	6 hours
Module 3	Hand Aari- Practice of frame fitting for hand aari	4 hours
Module 4	Practicing of locking, starting and finishing and chain stitch	4 hours
Module 5	Types of hand aari stitches	6 hours
Module 6	Practicing zardozi / embellishment	6 hours

## **Text books**

1. Narmatha., Aari Embroidery Designs Book - Mirror Work Tracing Neck Designs for Blouses and Kurtis Ganga, Publisher Ltd, (2010)

#### **References books:**

- 1.Mabel Van Niekerk, Embroider on Printed Fabrics, Google e-online books, South Africa. (2015).
- 2.Mabel Van Niekerk, Recycled Denim Crazy Patchwork Quilt, Mabel Dawn Van Niekerk, South Africa. (2015).
- 3.Dueep Jyoti Singh, John Davidson, Learning the Traditional Art of Hand Embroidery, Mendon Cottage Books, USA. (2016).
- 4. Vandana Bhandari, Jewelled Textiles: Gold and Silver Embellished Cloth of India, Om Books International, (2015).
- 5.Dueep Jyot Singh, John Davidson., Learning Decorative Stitches: The Art of Shirring and Smocking, Mendon Cottage Books, USA. (2016).