


**DIPLOMA IN APPAREL DESIGN AND FABRICATION TECHNOLOGY
FOURTH SEMESTER**

	Course Title: FABRIC TEXTURE		
	Credits (L:T:P) : 4:0:0	Total Contact Hours: 52	Course Code: 15FT43T
	Type of Course: Lectures, Self Study & Quiz	Credit :04 SEE- 100 Marks CIE- 25 Marks	Core/ Elective: Core

Prerequisites: Knowledge of textural fiber and fabric structure

COURSE OBJECTIVES

- 1 To know the various Characteristic of fabric finishes.
- 2 To understand the nature of dyes..
- 3 To distinguish dyeing and printing process.
- 4 To Know about different decorative fabric construction
- 5 To have the knowledge of leather processing.

Course Outcomes		CL	Linked PO	Teaching hrs
CO1	To understand different types fabric finishes.	U/A	1,2,3,4,5,6,7,9	12hrs
CO2	To enhance the knowledge of dyeing and printing.	U/R/A	1,2,3,5,6,7,8	8hrs
CO3	Ability to understand knitted fabric structure	U/R/A	2,3,4,6,8,9	10hrs
CO4	To analyze the Usage of various felted fabrics	U/R/A	1,2,5,6,7,	6hrs
CO5	To evaluate different decorative fabric construction.	U/R/A	1,2,3,4,9,10	10hrs
CO6	Ability to identify leather and genuine leather.	U/R/A	2,3,4,5,7,8,10	6hrs

COURSE-PO ATTAINMENT MATRIX

Course	Programme Outcomes									
	1	2	3	4	5	6	7	8	9	10
FABRIC TEXTURE	3	3	3	3	3	3	3	3	3	2

Level 3- Highly Addressed, Level 2-Moderately Addressed, Level 1-Low Addressed.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

If $\geq 40\%$ of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3

If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2

If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1

If $< 5\%$ of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

COURSE CONTENT AND BLUE PRINT OF MARKS FOR SEE

Unit No	Unit Name	Hour	Questions to be set for (5marks) PART - A			Questions to be set for (10marks) PART - B			Marks weightage (%)
			R	U	A	R	U	A	
1	Fabric Finishes	12hrs	1	-	1	-	1	1	23.07
2	Printing	8hrs	-	-	1	-	1	1	15.38
3	Knitting	10hrs	1	1	-	1	-	1	19.23
4	Felted fabric	6hrs	-	1		-	-	1	11.53
5	Decorative Fabric construction	10hrs	1	-	1	-	1	1	19.23
6	Leather	6hrs	1	-	-	-	-	1	11.53
			09(45marks)			10(100 marks)			100
	TOTAL	52							

Legend: R; Remember, U: Understand A: Application

CONTENT

Unit	Major Topics	Hours Allotted
1	Fabric Finishes	12hrs
2	Printing	8hrs
3	Knitting	10hrs
4	Felted fabric	6hrs
5	Decorative Fabric construction	10hrs
6	Leather	6hrs
	Total	52 hrs

UNIT I

FABRIC FINISHES

12 hrs

- 1.1 Aesthetic finishes- water proof, water repellent, soil resistance, fire proof and wash and wear.
- 1.2 Dyeing- Introduction, Selection of dyes. Classification of dyes-Natural- Animal, Mineral and vegetable.
- 1.3 Synthetic Types –basic, oxidation bases, acid, mordant, direct, vat, pigment,
- 1.4Types of dyeing methods
Stock, top, yarn, skein, package, space, piece, solvent, dope, chip, garment
Tests to determine colorfastness to washing, fastness to pressing, fastness to light, fastness to crocking and fastness to perspiration.

UNIT II

8 hrs

PRINTING

- 2.1 Introduction to printing
- 2.2 Methods of printing-Direct, discharge resist
- 2.3 Types-block, roller, duplex, stencil, screen, rotary screen, transfer, spray, batik ,tie dyeing, ikat

UNIT III

KNITTING

10hrs

- 3.1 Introduction to knitting
- 3.2 knitting machines trainer model knitting machine, automatic punch card knitting machine, circular knitting machine
- 3.3 Study of knitting needles ---latch needle, spring beard needle, compound needle
- 3.5 Construction of knitted fabrics-classification of knitted Stitches
- 3.6 Weft knitting- plain knit stitch, purl stitch, rib stitch
- 3.7 Warp knitting—Tricot knit, Milanese knit, jacquard knitting, pile knitting,

UNIT IV

6hrs

FELTED FABRICS

- 4.1 Introduction to felting
- 4.2 Felting process
- 4.3 Types of felt-wool felt, fur felt, properties of felt uses of felt
- 4.4 Introduction to web formation and bonding
- 4.5 Types of web formation and bonding their properties and uses

UNIT V

DECORATIVE FABRIC CONSTRUCTION

10hrs

- 5.1 Braiding, netting, lace, embroidery
- 5.2 Introduction to braiding-types of braid, their properties and uses
- 5.3 Introduction to net fabrics-types of net , their properties and uses
- 5.4 Introduction to lace fabrics-hand made lace-types of handmade lace, types of machine made lace, their properties and uses
- 5.5Introduction to embroidery-their uses and importance

UNIT VI

LEATHER

6hrs

- 6.1 Introduction to Leather
- 6.2 Processing of Leather
- 6.3 Types of leather
- 6.4 properties of Leather
- 6.5 Uses of leather

SEMINAR

Every student to select one of the following topic for the seminar.

1. Knitting
2. Decorative fabric Construction
3. Care of household Articles
4. Leather industry
5. Market survey of different decorative fabrics.

Indicative Reference:

1. Fiber to fabric- Bernerd p corbman McGRAW .HILL INTERNATIONAL EDITIONS
2. Understanding fabrics from fiber to finished cloth-Debbie Ann Gioello-fair child publications
3. Introduction to textiles-kanwar varinder pal singh-kalyani publishers
4. A text book of fibre science and technology-s.p. mishra-new age international publishers
5. Fabric studies-kanwar varinder pal singh-kalyani publishers
6. Text book of fabric science fundamentals to finishing-seema sekhri-eastern economy edition
7. Textiles and their care
8. Household textiles and laundry work-durga deulkar-atma ram and sons
9. Textile fibres and their use-katharine paddock hess-oxford ibh publishing co
10. Fabric care-noemia dsouza-new age international limited ,publishers
11. Fundamentals of textiles and their care-Susheela Dantyagi-orient long man ltd NewDelhi
12. Textile processing—j.L.smith,abhishek Publications,Chandigarh
13. Technology of textile processing—shenai—Sevale publications ,Bombay
14. Journals- Apparel Views, colouran

Related E- References

<https://www.youtube.com/watch?v=34P4sR6tP7M>
<https://www.youtube.com/watch?v=DRiVy1C6WE0>
<https://www.youtube.com/watch?v=wRRSjA2IA5k>
https://www.youtube.com/watch?v=G3G1_KgfbzA
<https://www.youtube.com/watch?v=wtYTlkhyFK0>
<https://www.youtube.com/watch?v=YYWlevX7Kw0>

COURSE ASSESSMENT AND EVALUATION

	What		To Whom	Frequency	Max. Marks	Evidence Collected	Course Outcomes
<u>DIRECT ASSESSMENT</u>		I A Tests	Students	Three IA (Average marks of three IA tests are considered)	20	Blue Books	<u>1 to 5</u>
		Class room Assignments		Class room Assignments	05	Log of Activity	<u>1&2</u>
				TOTAL	25		
	SEE -SEMESTER END EXAMINATION	End Exam		End Of the Course	100	Answer Scripts	ALL CO's
<u>INDIRECT ASSESSMENT</u>	Student Feedback on course		Students	Middle Of The Course	Feed Back Forms		
	End of Course Survey			End Of The Course	Questionnaire		ALL CO's

Note: I.A. test shall be conducted for 20 marks. Average marks of three tests shall be rounded off to the next higher digit.

Note to I A Verifier : The following documents to be verified by CIE verifier at the end of semester

- 1 Blue books**
- 2 Student suggested activities report for 05 marks**
- 3 student feedback on course regarding Effectiveness of Delivery of instructions and Assessment Methods.**

• MODEL OF RUBRICS FOR ASSESSING STUDENT ACTIVITY

Dimension	Scale					Students Score				
	Unsatisfactory 1	Developing 2	Satisfactory 3	Good 4	Exemplary 5	1	2	3	4	5
1. Research & gather information	Does not collect any information relating to the topic	Collects very limited information; some relate to the topic	Collects some basic information; most refer to the topic	Collects a good information; all refer to the topic	Collects a excellent deal of information; all refer to the topic	Ex: 2				
2. Fulfil team's	Does not collect any	Collects very limited	Collects some basic	Collects a good	Collects a excellent	3				

roles & duties	information relating to the topic	information; some relate to the topic	information; most refer to the topic	information all refer to the topic	deal of information; all refer to the topic					
3.Shares work equally	Does not collect any information relating to the topic	Collects very limited information; some relate to the topic	Collects some basic information; most refer to the topic	Collects a good information all refer to the topic	Collects a excellent deal of information; all refer to the topic	4				
4.Listen to other Team mates	Does not collect any information relating to the topic	Collects very limited information; some relate to the topic	Collects some basic information; most refer to the topic	Collects a good information; all refer to the topic	Collects a excellent deal of information; all refer to the topic	5				
Grand Average/Total=(2+3+4+5)=14/4=3.5=4						4				

Note: The above rubric is only an example. The concerned Course Coordinator may devise appropriate rubrics for the assigned activity.

MODEL QUESTION PAPER (CIE)

Test/Date and Time	Semester/year	Course/Course Code	Max Marks				
Ex: I test/6 th weak of sem 10-11 a m	IV SEM	FABRIC TEXTURE	20				
	Year: 2015-16	Course code:15FT43T					
Name of Course coordinator :		Units:1,2 Co: 1,2					
Note: Answer all questions							
Question no	Question				CL	CO	PO
1	Explain fireproof and waterproof finishes				A	1	1,2
2	What is dyeing explain classification of dyes				U	1	1,2
3	Describe Roller printing				A	2	1,2
	OR						
4	Explain natural dyes				R	2	1,2
	List out aesthetic finishes						
	OR						
	Explain stencil printing						

DIPLOMA IN APPAREL DESIGN AND FABRICATION TECHNOLOGY
THIRD SEMESTER
SUBJECT TITLE: FABRIC TEXTURE
MODEL QUESTION PAPER

PART-A

ANSWER ANY SIX QUESTIONS. EACH QUESTION CARRIES FIVE MARKS

- 1 Explain fireproof and waterproof finishes
- 2 What is dyeing explain classification of dyes
- 3 Describe Roller printing
- 4 Describe knitting machines
- 5 What is Jacquard Knitting explain
- 6 Enlist types of felt and write their uses
- 7 Describe Machine Braiding
- 8 Discuss the importance of embroidery
- 9 write the types of leather and its uses

PART-B

ANSWER ANY SEVEN QUESTIONS. EACH QUESTION CARRIES TEN MARKS

- 1 a) Explain natural dyes
b) Describe soil resistant and wash and wear finishes
- 2 Describe any five synthetic dyes
- 3 Explain the methods of printing
- 4 a) What do you know about Ikat printing
b) Explain circular knitting machine
- 5 with a neat sketch explain plain knit and purl knit stitches
- 6 a) What is pile knitting describe
b) Explain Tricot stitch with neat sketch
- 7 a) Explain felting process
b) write the properties and uses of felt fabrics
- 8 Explain net and braided fabric
- 9 Describe types of lace and write their uses
- 10 Explain the processing of leather

MODEL QUESTION BANK

COURSE: FABRIC TEXTURE

05 MAKS EACH

REMEMBER

List out aesthetic finishes
Explain water proof finishes
write the importance of fireproof finishes
Classify the dyes
Enlist different printing techniques
Explain stencil printing
Describe rotary printing
Explain felting process
write the properties of Felt fabrics
write the uses of leather
Write the sources of leather

UNDERSTAND

What do you know about soil resistance finishes
Describe water repellent finishes
write the importance of fireproof finishes
Describe natural dyes
Explain any two synthetic dyes
Discuss any two dyeing m
Explain knitting machines
Describe knitting needles
Explain felting process

APPLICATION

Discuss any two dyeing methods
Enlist different printing techniques
Explain stencil printing
Describe rotary printing
write about Batik printing

Explain knitting machines
Describe knitting needles
Describe weft knitting and warp knitting
Explain felting process
Describe web formations

10 MARKS EACH

REMEMBER

- 1 Define dyeing and classify the dyes
- 2 Describe different dyeing methods
- 3 Explain colorfastness
- 4 Describe Tie and Dye printing
- 5 Explain rollers printing with neat sketch
- 6 Explain warp knitting stitches
- 7 Explain weft knitting stitches

UNDERSTAND

- 8 With neat sketch explain machine knitting needles
- 9 Classify Knitting machines and write their uses
- 10 Differentiate between Resist printing and Discharge printing
- 11 Explain leather processing
- 12 Enlist types of leather and write their uses
- 13 Discuss the web formation
- 14 Define web formation and bonding and write their uses

APPLICATION

- 15 with a neat sketch explain Braiding
- 16 Enlist different types of laces write properties and uses
- 17 How do you take care of Lace Fabrics?
- 18 What is meant by colorfastness explain
- 19 List out non woven fabrics mention properties and uses
- 20 Distinguish between Roller and block printing

