VIMALA COLLEGE (AUTONOMOUS)

THRISSUR

(Affiliated to University of Calicut)

M Sc DEGREE PROGRAMME IN

HOME SCIENCE

(TEXTILES AND COSTUME SCIENCE)

CREDIT AND SEMESTER SYSTEM (CBCSS-PG 2019)

SYLLABUS

2020 ADMISSION ONWARDS

PROGRAME SPECIFIC OUTCOME OF MSC TEXTILES & COSTUME SCIENCE

1) Understand the awareness of marketing & advertisement.
2) Understand the methods & techniques used to analyze textile fibres, yarns& fabric& its end use performance
3) Understand & develop the skill ability to draft patterns for different garment
4) Understand & analyze the different types of looms, weaving techniques & weave patterns
5) Understand the principles of Quality assurance, chemical processing, finishing of textiles, fundamentals of dyeing, eco- friendly practices
6) Understand the techniques of research and develop skills in conducting research and applying statistical procedures
7) Understand color theories, color order specifications and develop sketching skills
8) Understand the global costumes of the world
9) Understand the draping procedures

M.Sc. HOME SCIENCE (TEXTILES AND COSTUME SCIENCE)

COURSE STRUCTURE AND SCHEME OF EXAMINATION UNDER CBCSS

Sl. No.	CORE COURSES	TITLE OF THE COURSE	INSTRUCTION HRS/ WK		CREDIT	EXAM HRS	SCHEME OF EVALUATION	
			T	P			EE WEIGHT (80%)	IE WEIGHT (20%)
I	HTC1C01	Historic Costumes	5	-	4	3	4	1
	HTC1C02	Fashion Marketing	5	-	4	3	4	1
	HTC1C03	Costume Design And Illustration	5	-	4	3	4	1
	HTC1C04	Introduction To Fashion Design Concept	4	-	4	3	4	1
	HTC1A01	Audit course I- AEC- Industrial Training/Seminar Presentations			4			
	HTC1C05	Research Methodology And Statistics	6	-	4	3	4	1
	Total		**25**		**20**			
II	HTC2C06	Quality Assurance And Textile Testing	6	-	4	3	4	1
	HTC2L01	Practical - Fashion Draping	-	4	4	3	4	1
	HTC2A02	Audit Course II- PCC- SPSS			4			
	HTC2C07	Visual Retailing And Entrepreneurship Management	5	-	4	3	4	1
	HTC2L02	Practical - Advanced Pattern Adaptation And Construction Techniques	-	6	4	6	4	1
	HTC2C08	Technical Textiles	5	-	4	3	4	1

	Total		**25**		**20**			
III	HTC3C09	Fabric Construction And Analysis	6	-	4	3	4	1
	HTC3C10	Internship	5	-	4	3	4	1
	HTC3C11	Textile Chemistry	6	-	4	3	4	1
	HTC3E01	**Elective Courses** 1.Fashion Choreography 2.Fashion Communication 3.Sociology Of Clothing	3	-	4	3	4	1
	HTC3E02	**Elective Courses** 1. Textiles and Environment 2. Science of Clothing Comfort 3. Testing of functional and technical textiles	5	-	4	3	4	1
	Total		**25**		**20**			
IV	HTC4L03	Practical- Quality Assurance And Textile Testing	-	5	4	3	4	1
	HTC4L04	Practical - Textile Chemistry	-	5	4	3	4	1
	HTC4E03	**Elective Courses** 1.Home Textiles 2.Computer Application In Fashion Designing 3. Knit Wear Technology	5	-	4	3	4	1
	HTC4P01	Project	-	10	4		4	1
	HTC4V01	Viva Voce	-	-	4		4	1
	TOTAL		**25**		**20**			
	TOTAL CREDITS (CORE, ELECTIVE, PROJECT AND VIVA)		**80**					

GRADING AND EVALUATION

(1) Minimum Credits for pass

Accumulated minimum credit required for successful completion of the course shall be 80.

(2)A project work of 4 credits is compulsory and it should be done in III & IV semesters. Also a comprehensive Viva Voce may be conducted by external examiners at the end of IV Semester and carries 4 credits.

(3) Evaluation and Grading:

Evaluation: The evaluation scheme for each course shall contain two parts; (a) Internal / Continuous Assessment (CA) and (b) External / End Semester Evaluation (ESE).
Of the total, 20% weightage shall be given to Internal evaluation / Continuous assessment and the remaining 80% to External/ESE and the ratio and weightage between Internal and External is **1:4.**

Primary evaluation for Internal and External shall be based on 6 letter grades **(A+, A, B, C, D and E)** with numerical values (Grade Points) of **5, 4, 3, 2, 1 & 0** respectively.
Grade Point Average: Internal and External components are separately graded and the combined grade point with weightage **1** for Internal and **4** for external shall be applied to calculate the **Grade Point Average (GPA)** of each course. Letter grade shall be assigned to each course based on the categorization based on Ten point Scale.

Evaluation of Audit Courses: The examinaton and evaluation shall be conducted by the college itself either in the normal structure or MCQ model from the Question Bank and other guidelines provided by the University/BoS. The Question paper shall be for minimum 20 weightage and a minimum of 2 hour duration for the examination. The result has to be intimated / uploaded to the University during the Third Semester as per the notification of the University.

For all courses (Theory & Practical)/Semester/Overall Programme, Letter grades and **GPA/SGPA/CGPA** are given on the following way :

a) First Stage Evaluation for both Internal and External done by the Teachers concerned in the following Scale :

GRADE	GRADE POINT
A+	5
A	4
B	3
C	2
D	1
E	

b) The Grade Range for both Internal & External shall be :

Letter Grade	Grade Range	Range of Percentage (%)	Merit / Indicator
O	4.25 – 5.00	85.00-100.00	Outstanding
A+	3.75 – 4.24	75.00-84.99	Excellent
A	3.25 – 3.74	65.00-74.99	Very Good
B+	2.75 – 3.24	55.00-64.99	Good
B	2.50 – 2.74	50.00-54.99	Above Average
C	2.25 – 2.49	45.00-49.99	Average
P	2.00 -2.24	40.00-44.99	Pass
F	< 2.00	Below 40	Fail
I	0	-	Incomplete
Ab	0	-	Absent

'B 'Grade lower limit is 50% and 'B+' Grade lower limit is 55%

(4) Weightage of Internal and External valuation:

The evaluation scheme for each course shall contain two parts (1) internal evaluation (2) external evaluation. Its weightage are as follows:

Evaluation	**Weightage**
Internal	1 (or 20%)
External	4 (or 80%)

Both internal and external evaluation will be carried out using Direct Grading System

A) Theory: Every Semester

Pattern of question Paper **-External marks distribution**

Division	Type	No. of Questions	Weightage	Total Weightage
Part A	Short Answer	4out of 7	2	8
Part B	Short Essay	4 out of 7	3	12
Part C	Essay	2 out of 4	5	10
Total Weightage				**30**

Internal marks distribution

Sl.No	Criteria	Weightage
1	Attendance	1
2	Assignments	1
3	Seminar	1
4	Test papers-2-	2
Total		**5**

B) PRACTICAL

Internal marks distribution

Sl.No	Criteria	Weightage
1	Lab skill	4
2	Record	3
3	Practical test	3
Total		**10**

External marks distribution

HTC2 L01: PRACTICAL -FASHION DRAPING

Sl No	Criteria	Weightage
1	Grain	3
2	Neatness	3
3	Completion	6
4	Draping	10
5	Trueing up	3
6	Record	5
Total		**30**

HTC2 L02: PRACTICAL- ADVANCED PATTERN ADAPTATIONAND CONSTRUCTION TECHNIQUES

Sl. No	Criteria	Weightage
1	Drafting	5
2	Construction	5
3	Grain	1
4	Neatness and Completion	4
5	Garment	10
6	Record	5
Total		**30**

HTC4 L03: PRACTICAL- QUALITY ASSURANCE AND TEXTILE TESTING

Sl. No	Criteria	Weightage
1	Principle	5
2	Procedure	8
3	Result	10
4	Sample presentation	2
5	Record	5
Total		**30**

HTC4 P04: TEXTILE CHEMISTRY

Sl. No	Criteria	Weightage
1	Principle	5
2	Procedure	8
3	Result	10
4	Sample presentation	2
5	Record	5
Total		**30**

HTC4P01 -PROJECT

Internal Marks distribution

Sl.No	Criteria	Weightage
1	Relevance of the topic and statement of problem	2
2	Methodology and analysis	2
3	Quality of report and presentation	2
4	Viva- Voce	4
Total		10

External marks distribution

Sl.No	Criteria	Weightage (Total 40)
1	Relevance of the topic and statement of problem	8
2	Methodology and analysis	8
3	Quality of report and presentation	8
4	Viva- Voce	16
Total		**40**

HTC4V01- Viva Voce

Internal Marks distribution

Sl.No	Criteria	Weightage
1	Preparation	1
2	Presentation	2
3	Knowledge	2
4	Total	5

External marks distribution

Sl.No	Criteria	Weightage
1	Preparation	10
2	Presentation	10
3	Knowledge	10
4	**Total**	**30**

M SC HOME SCIENCE (TEXTILES AND COSTUME SCIENCE)

COURSE STRUCTURE UNDER CBCSS-PG2019

SEMESTER - I

SEMESTER I

HTC1C01 HISTORIC COSTUMES

Hours per week: 5 Credit:4

Objectives

1. To help students know the dress mode in all ages
2. To explain the different types of costume designs prevailing in different parts of the world
3. To give information about their origin,fabrics, and accessories.

Sl No	Course Outcome	Pos/ PSOs	CL	KC	Class Sessions	Lab/ Field study
CO 1	Compare the different costumes of India	**Pos 8 /pso s8**	**AN**	C	10	
CO 2	Build up an idea about couture from middle age period	**Pos 8/ psos 8**	**AP**	F	10	
CO 3	Understand and discuss the garments and ,accessories including headgear and foot wear of various regions	**Pos 8 /pso s8**	**U**	C	20	
CO 4	Analyze the fashion trends in 18^{th} century	**Pos 8/ psos 8**	**AN**	C	20	
CO 5	Explain the evolution of costumes	**Pos 8 /pso s8**	**U**	F	10	
CO 6	Understand the information regarding the costumes orgin, fabrics, colours and accessories	**Pos/ 8 psos 8**	**U**	C	20	
Total hours of Instruction					90	

UNIT 1 THE BEGINNING OF DRESS

Evolution of costumes ,need and importance of clothing

UNIT II COUTURE FROM ANCIENT PERIOD

Egyptian

Men and women –garment (shendyt, loin cloth ,kalasiris),

Asiatic

Men and women –garment (pantaloon,tunic)

accessories including head& foot wear

UNIT III GREEK COSTUMES

Men and women –garment (chiton, peplos)

accessories including head& foot wear

UNIT IV ROMAN COSTUMES

Men and women –garment(loin cloth, stola ,tunic, palla, toga)

accessories including head& foot wear

UNIT V FRENCH COSTUMES

Men and women –garment(chemise ,breech cloth, hose, palla, mantle ,corset)

accessories including head& foot wear

UNIT VI ITALIAN ,GERMAN & ENGLAND COSTUMES

Italian

Men and women –garment(rich heavy material, large sleeves ,kirtle &gown)

German

Men and women –garment(tunic, chemise, coat)

England

Men and women –garment(cloak, tunic, trousers ,hose, kirtle gown, surcoat)

accessories including head& foot wear

UNIT VII COSTUMES OF INDIA

Men & women garment ,accessories including head &footwear- Indusvalley ,Vedic Mauryan, Sunga, Satavahana ,Kushan, Gupta, Mughal

REFERENCES:

1. Inside fashion design-Sharon Lee Tate, Harper and row, Publishers New York
2. Life Styles, Fashion Styles-Kathryn Samuel, Orbis, London
3. The Great Fashion Designers-Milbank, C.R. (1985) Couture, Thames and Hudson Publications
4. The Changing World of Fashion-Carter, E (1977), G.P. Putnam's Sons, New York
5. The World of Fashion-Rubin, L. G.(1976), Canfield Press, San Francisco
6. Fashion Kaleidoscope-Castelino, M. (1994), Rup & Co.
7. The Fashion Makers-Walz B. and Morris, B. (1978) , Random House
8. Lifestyle – Fashion styles-Samuel, K. (1986),Orbis Book Publishing Corporation Ltd, London
9. Fashion Design and Product Development-Carr, H. and Pomery, J. (1992), Blackwell Scientific Publications, London, Edinburgh, Boston, Abling Bina, Fashion Sketchbook, Fairchild Publishers, New York
10. The Concise History of Costume and Fashion-Laver. James, New York, Harry Abrahams, 1960
11. Costume through the ages-Laver. James , New York, Simon and Schuster, 1968
12. The Mode in Costume-Wilcox. Turner R, New York, Charles Scribner's Sons, 1958

13. Indian Costume Ghurey, G.S , Bombay, Popular Prakashan, 1951

14. Costume and Textiles of India-Bhushan Brij J., Bombay, D.B. Taraporwala & Co.

15. Historic Costumes-Lester R.N Illinois. Chas A. Benette and Co.

16. Costume Throughout the ages Ecan C.C, New York, J.B. Limancott

17. The History of Costume -Kemper Rachel H.

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SEMESTER I

HTC1C02 FASHION MARKETING

Hours per week-5 **credit:4**

Objectives :

1. To increase awareness of the students regarding marketing
2. To study and analyse the fashion market
3. To understand the marketing process

	Course Outcome	**POs/ PSOs**	**CL**	**KC**	**Class Sessions**	**Lab/ Field study**
CO1	Recognize the importance of aesthetics and principles of design in the seasonal fashion world	PO3/ PO2	U	F,C	10	
CO2	Evaluate the trends in the fashion industry and their impact on overall business operations and strategy	PO6	E	F,P	10	
CO3	Assess social, cultural and economical factors and their impact on the global consumer and market place	PO3/ PO2	E	P	10	
CO4	Perceive the skill of inspirational and innovative techniques to implement in apparel merchandise	PO6	E	F	10	
CO5	Plan and budget sales for a seasonal range	PO4/ PSO 1	C	M	10	
CO6	Determine a commercially appropriate product range for a retailer	PO2	E	P	15	
CO7	Create a sales forecast for a retail store	PO2/ PSO 1	C	P	15	
CO8	Analyze the fashion industry's activities to develop/implement a marketing strategy	PO7/ PO2	A	C,P	10	
Total hours of Instruction					90	

UNIT-I

Maketing mix- Definition, functions of market

UNIT- II

Introduction to Retailing – Definition – Functions performed by retailers. The Concept of Retailing - role of retailing in merchandising, The Retail Mix, Retail Environment,

Types of Retail stores.

Multi channel Retailing – Store channel – Catalog channel – Internet channel. Customer Buying Behavior – The buying process – Types of buying decisions

Social factors influencing the buying process –Family, Reference groups, Culture.

UNIT-III

Retail Pricing – Considerations in setting retail prices – Price adjustments –

Markdowns, Variable pricing and price discrimination – Pricing Strategies –

High / Low Pricing, Everyday low pricing – Pricing Techniques for increasing

Sales –Leader pricing, Price lining, Odd pricing

Advertising and Media Planning, Fashion shows and other events
Sales promotion

UNIT-IV

Customer Relationship Management – Collecting customer data – Analyzing

customer data and identifying target customers – converting good customers

into best customers – dealing with unprofitable customers.

Marketing research and analysis – market surveys

UNIT-V

Knowledge of Fashion Trends, Brands and Designers, Introduction to International designers. Business opportunities and avenues.

REFERENCES:

1. Fashion Design and Product Development, Harold Carr and John Pomeroy, Black well Science Inc, Cambridge (1992)

2. Fashion Marketing, Mike Easey, Oxford University press, Wynford Drve, Don Mills, Ontario (1995)
3. Introduction to Fashion, Patrick John, B T Batsford Ltd, Ireland, Fullham road, London (1992).
4. Fashion From Concepts to Consumer, Stephens Frings, PrenticeHall,7th Edition 2002.
5. Marketing Management, Philip Kotler, Prentice Hall, 7th Edition 1996.
6. Retailing Management by Michael Levy, Barton A Weitz, Ajay Pandit
7. The Business of Fashion designing, Manufacturing and Marketing by Leslie Davis Burns, Nancy O Bryant
8. Inside fashion Business by Dickerson Kitty G

SEMESTER I

HTC1C03 COSTUME DESIGN AND ILLUSTRATION

Hours per week-5 **Credit-4**

Objectives:

1. To introduce students to fashion illustration, sketching and rendering techniques.
2. To enable the students to work outward from a point of focus or inspiration to develop a complete collection.

Sl No	Course Outcome	Pos/ PSOs	CL	KC	Class Sessions	Lab/ Field study
C01	Adapt their artistic abilities to support their future design careers	**PSO7**	C	C	15	
C02	Develop sketching skills	**PSO7**	C	P	15	
C03	Build the practical knowledge of fashion sketches, illustration, mediums, rendering, fashion details	**PSO7**	Ap	P	15	
C04	Design costumes according to various body shapes	**PSO7**	C	C	15	
C05	Identify the human figure, construction, anatomy of men, women & child	**PSO7**	Ap	P	15	
C06	Influence the students to inspire to develop fashion collection (portfolio)	**PSO7**	E	M	15	
Total hours of Instruction					90	

UNIT I

Features of fashion – style, acceptance, change.

Factors affecting fashion – economic factors, sociological factors, psychological factors.

Stages of the fashion, Adoption theories of fashion, Reasons for wearing clothing

Elements used in creating a design

Principles of design

Textures in clothing

Color theory- Dimensions, psychological impacts, color scheme, color system, color illusions & emotions

UNIT II

Human proportion and figure construction.

Methods of determining individual proportions

Heads theory- 8 head, 10 head, 12 head and 5 head for kids

Women's ensembles for pear, diamond, round, hourglass, inverted triangle,

straight body types.

Men's Ensembles -Short and heavy body type, Short and thin body,Tall & heavy body, Tall and thin body type, Athletic body

Ensembles for children – Infants, Toddlers, Pre School, Teenager, College going.

UNIT III

Sketching- principles of Sketching, basic figure drawing- gesture and stance, anatomy of human figures.

UNIT IV

Fashion shows-history and models-classification

UNIT V

Designing and recording a fashion collection – selecting a theme, carrying out

research and designing process, making samples of ensembles.

RELATED EXPERIENCE:

1. Different Lines – Vertical, Horizontal, Diagonal, Wavy, zigzag, Dotted, Dashed, Spiral etc.
2. Free hand drawing techniques of brush and pencil and related exercises.

3. Introduction to different mediums- Poster Color, Water Color, Drawing Ink, Steadlers, Crayons, Charcoal Pencil, Charcoal Stick, Pencil.
4. Basic 8 Head Croqui., Basic 10 and 12 Head Croqui, Fashion Poses, Facial features and Hair style.
5. Introduction to Fashion Details – Various Silhouettes & Construction Details – Necklines,collars, Blouses, coats and jackets, Sleeves, Pleats, cowls and cascades, Skirts and pants and yokes.
6. Jewellery and footwear
7. Photoanalysis
8. Creating various textures using different techniques and mediums – Net, Knit, Denim, Velvet, Lace, Fur, Brocade, Tweed, Leather, Silk and Corduroy.

REFERENCES

1. Seaman, Fashion Drawing – The Basic Principles", 1994, B.T.Batsford, London,. Seaman Julian, Professional Fashion Illustration", 1995, Batsford, London,.
2. Drake And Nicholas, "Fashion Illustrations" , 1994, Thames and Hudson, London,.
3. Abling Bina, Fashion Sketch Book", 2006, Fairchild publication.
4. Fashion from Concept to Consumer by Gini Stephens Frings, Prentice Hall, 2002.
5. Individuality, Suzanne Greene Marshall, Mary Kefgen, Prentice Hall, 2000.
6. Comdex fashion design, Vol I, Fashion Concepts, Dr. Navneet Kaur, Dream Tech Press,2010.
7. Comdex fashion design, Vol II, Ensembles for your body type, Dr. Navneet Kaur, Dream Tech Press,2010.
8. Comdex fashion design, Vol III, Designing and showcasing a fashion collection, Dr. Navneet Kaur, Dream Tech Press,2010.

SEMESTER I

HTC1C04 INTRODUCTION TO FASHION DESIGN CONCEPT

Hours per week-4 **Credit- 4**

Objectives:

1. To give information about fashion terminologies.
2. To introduce the students about fashion markets, fashion business and garment industry.

	Course Outcomes	**PSO**	**CL**	**KC**	**Class Sessions**	**Lab Sessions/ Field Study**
CO1	CO1	Analyze and use color units effectively in their design process.	POS9/PSO	A	P	10
CO2	CO2	Identify and discuss concepts related to the historical back ground of textiles and fashion.	POS7/PSO8	AP	M	12
CO3	CO3	Identify and discuss concepts related to the design, production and evaluation of textiles and apparel products.	POS6/PSO7	AP	M	10
CO4	CO4	Identify and discuss concepts related to the management, marketing, and consumption of textile and apparel products.	POS7/PSO1	AP	M	15
CO5	CO5	Evaluate trends in the fashion industry and their impact on overall business	POS8/PSO1	E	F,P	15

		operation and strategy.				
CO6	CO6	Utilize applied management topics to manage, control, and improve industry environment	POS7/PSO5	AP	F,C	10
						72

UNIT - I INTRODUCTION

Fashion terminologies- apparel, batik, boutique, calico, blended yarn, classic, cording, display, fad, fashion, high fashion, hippie style, ikat, mass fashion, mass production, natural fibers, ready- wear, prêt- a – porter, silhouette, textiles, concepts, its creation and analysis

Fashion leaders, Fashion followers, Laggards, Innovators, Victims, Motivators

UNIT - II FUNCTIONS OF VARIOUS DEPARTMENT IN GARMENT INDUSTRY

Design department, marketing, finance, purchasing, product and operation

UNIT III FASHION BUSINESS

Fashion cycle, Fashion designer- role in the industry

Fashion forecasting, seasons of fashion

Understanding and sketching of theme based on fashion forecast

Sourcing of raw materials.

Developing line

Spec sheet study

Sampling

Garment analyses

Costing – construction of garments

Line presentation

UNIT IV FASHION MARKETS

Fashion centers, fashion markets of the world

Designers- Indian and International- Rohit Bal, Ritu Beri, Manish Malhotra, Coco Chanel, Christian Dior,Gianni Versace.

REFERENCES

1. Inside fashion design-Sharon Lee Tate, Harper and row, Publishers New York

2. Life Styles, Fashion Styles-Kathryn Samuel, Orbis, London

3. The Great Fashion Designers-Milbank, C.R. (1985) Couture, Thames and Hudson Publications

4. The Changing World of Fashion-Carter, E (1977), G.P. Putnam's Sons, New York

5. The World of Fashion-Rubin, L. G.(1976), Canfield Press, San Francisco

6. Fashion Kaleidoscope-Castelino, M. (1994), Rup & Co.

7. The Fashion Makers-Walz B. and Morris, B. (1978) , Random House

8. Lifestyle – Fashion styles-Samuel, K. (1986),Orbis Book Publishing Corporation Ltd, London

9. Fashion Design and Product Development-Carr, H. and Pomery, J. (1992), Blackwell Scientific Publications, London, Edinburgh, Boston, Abling Bina, Fashion Sketchbook, Fairchild Publishers, New York

SEMESTER I

HTC1C05 RESEARCH METHODOLOGY AND STATISITICS

Hours per week: 6 **Credit: 4**

Objectives

1. Understand the methodology of research and techniques
2. Develop skills in conducting research from planning a study to report writing
3. Apply statistical procedure to analyse numerical data draw inferences

Sl No	Course Outcome	Pos/ PSOs	CL	KC	Class Sessions	Lab/ Field study
1	Outline of research concepts	PO1	R	F	10	
2	Compare different types of research methods	PO1/ PSO 6	U	P	12	
3	Construct research design or proposal for future project works	PO1/ PSO 6	A	P	22	
4	Examine various sampling techniques and measurement scales	PO7	U	F	20	
5	Develop report writing or presentation skills	PO1	C	P	12	
6	Choose right statistical techniques to be used with various research methods	PO7/ PSO 6	R	P	15	
7	Interpret statistical literature, research articles, the claims made on the basis of statistics	PO4/ PSO 6	E	F	17	
	Total hours of Instruction				108	

PART A: RESEARCH METHODS

UNIT I FUNDAMENTAL CONCEPT OF RESEARCH

Meaning, definition, objectives and characteristics of Research –basic research (fundamental research): applied research, action research, expost facto research, evaluation research, historical research, exploratory research, industrial research, developmental research.

UNIT II DEFINING RESEARCH PROBLEM

Definition and selection, necessity of defining the problem, technique involved in defining a problem

UNIT III RESEARCH DESIGN / PROPOSAL

Meaning and purpose of a research design or proposal, research problem definition, identification, statement of research problem, criteria for selection, definition of concepts (operational definition).Variables - types of variables, independent and dependent variables, control and intervening variables. Hypothesis - Meaning and importance, types. Finding related literature: Significance, source, role taking. Preparing a research proposal related to fashion or textiles.

UNIT IV METHODS OF DATA COLLECTION

Collection of primary data – observation method, Interview method, collection of Data through questionnaires and schedules, other methods of data collection, collection of secondary data

UNIT V MEASUREMENTS AND SCALING TECHNIQUES

Measurement in research, Measurement scales, Sources of error in measurement, Technique of developing measurement tools, scaling-meaning, classification and techniques

UNIT VI SAMPLING

Census and sample method ,theoretical basis for sampling, methods of sampling ,size of sample merits and limitations of sampling ,sampling and non sampling errors ,reliability of sampling.

UNIT VII REPRESENTATION OF DATA

Significance of diagrams, graphs, types of diagrams and graphs, limitation of diagrams and graphs, meaning and advantage of statistical presentation of data

UNIT VIII RESEARCH REPORT WRITING

Principles of report writing ,basic components, preliminaries, text of reports, bibliography, foot notes, spacing ,margins, indentations , quotations , writing a scientific paper. Project proposal

PART B: STATISTICS

UNIT I DESCRIPTIVE STATISTICS

1. Measures of central tendency-mean ,median, mode

2. Measures of variability –range, quartile deviation, mean deviation Standard deviation

3. Correlation coefficients, rank order correlation, product moment correlation – regression and prediction 4. Normal probability curve –properties, practical applications

UNIT II SAMPLING STATISTICS

1. Statistical inference and central limit theorem

2. Null hypothesis and tests of significance

3. The chi-square

4. Testing difference between mean, proportions, standard deviations and correlations.

UNIT III INTRODUCTION TO STATISTICAL PACKAGE FOR SOCIAL SCIRNCES (SPSS)

RELATED EXPERIENCE

1. Construct a research tool.
2. Prepare a research tool.
3. Present abstract of a research report.

REFERENCES

1. Kothari.C.R, Research Methodology, Wiley Eastern Ltd, New Delhi, 2000.
2. Best W L & Khan V, Research in Education, 7th edition, Prentice hall Private, New Delhi.
3. Roul L, Methodology of Educational Research, 2nd edition, Vikas Publishing House Ltd, New Delhi.
4. Gupta.SC & Kapur VK, Fundamentals of mathematical statistics, Sulthan Chand & Sons, New Delhi, 2001.

SEMESTER - II

SEMESTER II

HTC2C06 QUALITY ASSURANCE AND TEXTILE TESTING

Hours per week: 6 **Credit: 4**

Objectives:

1. To develop an understanding of methods and techniques used to analyse textile fibers, yarns and fabrics for end use performance
2. To acquire knowledge and understanding of various structural properties of textiles and relate them to end use fabric performance and product
3. To familiarize students with the different testing equipments, their underlying principles and the international accepted standards, test methods and the language of measurement
4. To be able to analyse and interpret the results and predict the general textile behavior Performance
5. To develop understanding of the importance of quality control in textile testing

	Course Outcome	**POs/ PSOs**	**CL**	**KC**	**Class Sessions**	**Lab/ Field study**
CO1	Understand the method of testing textile fibers, yarns and fabrics	PSO 2/PO 7	U	F	12	15
CO2	Analyze and interpret the results of fabric testing from testing equipments	PSO 2/PO 7	A	M	30	21
CO3	Apply statistical techniques for analyzing test results	PO7	Ap	P	12	10
CO5	Identify various fabric defects and their causes and remedies	PSO 5/PO 1	Ap	C,P	8	6
CO6	Explain the principle of total quality management of textiles(TQM)	PO1 /PS O5	U	F	6	6
CO7	Develop innovative tools to implement TQM in the textile industry	PSO 4	Ap	M	10	8
CO8	Measure the quality particulars of textile material at different stages of production and	PSO 5	E	P	10	10

	know the standards					
CO9	Identify quality deviations of fabrics	PO1	Ap	P	6	
CO10	Understand and evaluate quality assessment of final product	PSO 4	U/ E	M	4	4
CO11	Identify aspects of quality in the design and construction of textile items	PO1	Ap	M	10	10
Total hours of Instruction					108	90

UNIT I IMPORTANCE OF TEXTILE TESTING AND ANALYSIS

Objectives & importance of textile testing. Importance of standards, different types of textile standards, Introduction to internal bodies such as ISI, ASTM, BS and AWTA, national and international organizations involved in textile testing,

Quality control of textile products.

Quality standards as applicable to various types of textiles (Garments yardage, knits, woven, carpets, processing, dyeing), ecolabels- woolmark, silkmark

UNIT II FIBER DIMENSIONS

Fiber Fineness, Methods of measuring fiber fineness

Fiber length, methods of measuring fiber length Fiber strength – Single fiber method, Bundle strength method

UNIT III YARN TEST

Linear Density – Direct & Indirect system, folded yarns, methods of measuring linear density of yarns from packages and skeins and from a fabric sample

Yarn Crimp

Yarn Twist – Level of twist and twist factor methods of measuring twist, yarn evenness and methods of assessing evenness

Yarn strength – Single strand method skein method, count strength product (CSP)

UNIT IV TESTING AND EVALUATION OF FABRIC AND GARMENT

Strength properties of Textile & Apparel –Terminologies and definitions like force units, Breaking strength and Tensile strength, Stress, specific stress, Tenacity, Elongation, Strain, Extension, Extension percentage, Gauge length, Elastic recovery, Force and elongation curve

Factors affecting tensile testing, fabric characteristics affecting tensile properties, tensile testing machines(specify CRE, CRL,CRT) and their working principles

UNIT V FABRIC TEST METHODS

Breaking strength – Ravelled strip method, Cut strip method and Grab method

Tearing Strength – Tongue tear test, Trapezoid method, Elmendorf tear test

Bursting strength – Hydraulic / Diaphragm bursting test

Fabric Stiffness and Handle – definitions, methods of measuring fabric stiffness - Shirley stiffness test, Hanging loop method

Drape – definitions, methods of measuring fabric drape – drape meter

Crease Resistance and Crease Recovery – definitions of terms, advantages of giving resin treatment to fabrics, fabric characteristics affecting wrinkle resistance, Methods of measuring crease recovery – Tootal test, Shirley crease recovery test,

visual comparison method

i) Kawabata Evaluation system (KES) for fabrics.

ii) Fabric Assurance by Simple Testing (FAST) system.

UNIT VI FABRIC / GARMENT SERVICEABILITY –

Definitions of terms – serviceability, wear durability Snagging – definition, methods for testing snag resistance of fabric

Pilling – definition, causes of pilling, stages in formation of pilling, remedies for reducing pilling, methods for testing pilling resistance of fabrics – brush and sponge pilling test, random tumble pilling test

Abrasion – definition, types of abrasion, properties affecting abrasion resistance, methods used for evaluating abrasion , flexing and abrasion method, rotary platform method, Accelerator method, edge and fold abrasion method (all in brief), assessment of abraded sample

UNIT VII WEAR COMFORT OF CLOTHING –

Air Permeability – definitions, air resistance, air porosity, fabric properties and air permeability, methods for measuring air permeability of fabrics – Shirley air permeability tester

Fabric wicking- longitudinal wicking, wicking test methods – Vertical wicking and Transverse wicking

Water Absorption of Fabrics – Water absorption, methods of measuring amount of water absorbed – static Immersion test

Wettability of fabrics – definition, methods used or testing wettability of fabrics

Sinking time test of fabrics

Water Repellency of Fabrics – Definitions of waterproof shower proof, water repellent fabrics. Methods for measuring the water repellency of fabrics – Spray test, Bundesmann test, Drop penetration test, WIRA shower test

Colour Fastness – Introduction, colour fastness test methods to washing, drycleaning, light, crocking, perspiration, heat (hot pressing)

REFERENCES:

1. Principles of Textile Testing – J.E.Booth, Newness Butterworth, London

2. Textile Testing and Analysis – Billie J. Collier and Helen E. Epps, Prentice Hall, New Jersey

3. Textile Testing – John H. Skinkle, Brooklyn, New York

4. Handbook of Textile Testing and Quality Control – Groover and Hamby

5. An Introduction to Quality Control for Apparel Industry – Pradip V. Mehta, Marcel Dekker, New York

6. Textile Objective measurement Automation in Garment Manufacture – George Stylios – Ellis Horwood Ltd, England

7. Knitted Clothing Technology – Brackenbury Terry, Blackwell Science Ltd

8. Textile Testing & Quality Control Standards like – BIS, BS, ASTM, ISO, AATCC,

SEMESTER II

HTC2L01 FASHION DRAPING (P)

Hours per week: 4 **Credit: 4**

Objectives:

1. To teach the students the basics principles, and interpret and analyze complex drapes.
2. To enable students to create their original designs on a three dimensional form using draping method.

Sl No	Course Outcome	Pos/PSOs	CL	KC	Class Session	Lab/Field study
CO 1	Develop skills to build up the basic dress foundation	**Pos9/psOs9**	AP	F		10
CO 2	Develop skills to design the bodice style	**Pos9/ psOs9**	AP	F		10
CO 3	Analyze and understand the dart equivalents and dart manipulations	**Pos9/ psOs9**	C	C		10
CO 4	Develop skills to adapt the different neckline variations	**Pos9/ psOs9**	C	P		12
CO 5	Explain the draping principles and techniques	**Pos9/ psOs9**	U	F		10
C06	Develop skills to create skirt variations	**Pos9/ psOs9**	AN/c	C		10
CO 7	Understand the fabric characteristics and terms for draping	**Pos9/ psOs9**	AP	F		10
						72

UNIT I

Fabric characteristics and terms.

Dress form: Preparation, Measurement and Tools.

Draping principles and techniques.

UNIT II

Basic dress foundation: Front and Back bodice, Front and Back straight skirt

Dart manipulations

Dart equivalents: Gathers, Pleats, Tucks

Yokes

Neckline variations- raised, cowl, collars – shawl, Chinese,

Sleeves- Basic sleeve ,puff, full, tulip, plain, kimono

UNIT III

Bodice styles: Classic princess drape, Surplice, Off –Shoulder, will power.

Skirts: A-line, flare, Stylized yoke with pleat / flare skirt, Skirt with gathered waist line.

REFERENCES

1. Draping for apparel design –Helen Joseph-Armstrong
2. The art of fashion draping –Connie Amaden-Crawford
3. Draping for fashion design-Hilde Jaffe,NurieRelis
4. Designs cutting and draping for special occasion clothes,for evening wear and party Wear, Drawncloak, Chryssalis
5. Dress design-draping and flat pattern, hill house MS,HoughtonMiffin co London USA.
6. The theory of fashion design, Brockman, Magritha,John Wiley sons, NewYork
7. Design through draping, Sheldom, Marhta Burgers Publishing company, Minneapolis,USA.
8. Modern pattern design ,Popin, Harut,Funk and Wagnalls, New York and London

SEMESTER II

HTC2C07 VISUAL RETAILING AND ENTREPRENEURSHIP MANAGEMENT

Hours per week: 5 **Credit: 4**

Objectives:

1. To sensitize /orient to the concept of visual merchandising
2. To provide the basic working tools and skills related to visual merchandising
3. To acquire the advanced knowledge of Boutique

	Course Outcomes	**PSO**	**CL**	**KC**	**Class Sessions**	**Lab Sessions/ Field Study**
CO1	Evaluate the relationship between creativity and marketing..	POS7/PO5	E	F	10	
CO2	Entrepreneurship development and understand various strategies to choose fashion as a career	POS8/PO6	U	F	10	
CO3	Understand the global fashion business, the differences between business models that regulate the industry and the key issues that are recurrent in the world of fashion.	POS6/PO8	U	F	15	
CO4	Understand the history of retailing to inform development of contemporary retail	POS6/PO	U	F	15	

	strategy.					
CO5	Develop a merchandise plan and budget it	POS1/PO8	C	P	10	
CO6	Understand and apply the promotional elements of retailing.	POS1/PO8	U	F	15	
CO7	Identify the environmental factors that impact retailing and develop short and long-term plans to address existing and emerging issues.	POS8/PO8	AP	C	15	
	Total hours of Instruction				90	

UNIT I

Objectives of Display, use of colour and texture, line and composition, use of light and effect of Lightings, kinds of display and settings

UNIT II

Location management- Store Exterior, Window Display, Store Interior

UNIT III

Equipments used- Mannequins, Fixtures, Visual Merchandising and Dressing Fixtures, Furniture as props

Attention getting devices, Familiar symbols, Masking and proscenia, Sale ideas, Fashion Accessories, Graphics and Signage

Store Planning and Design, Career opportunities in Visual Merchandising

UNIT IV

Entrepreneurship – Definition, characteristics, employment promotion

II. Business environment for the entrepreneur Government of India's policy towards promotion of entrepreneurship, reservations and sanctions for small scale sector.

III. Agencies for development of entrepreneurship

UNIT V

Technical communication – Importance of Business communication, Principles, Procedures, Formulation of project proposal, budget estimate and Feasibility of report.

Establishing an enterprise – problems, information, source / schemes of assistance etc.

Managing the Boutique– Store management responsibilities – Controlling costs.

Labour scheduling, store maintenance – Reducing inventory shrinkage.

Boutique Design – Layouts – signage and Graphics – Feature Areas – Space management – Visual Merchandising –Fixtures, Presentation techniques.

Customer Service strategies

REFERENCES:

1. Visual Merchandising and Display / Edition 5by Martin M. Pegler, Fairchild
2. Publication.
3. Contemporary Visual Merchandising and Environmental Design by Jay
4. Diamond, Ellen Diamond in Books
5. Visual Merchandising and Store Design Workbook by Greg M. Gorman - ST
6. Publications (1996)
7. Visual Merchandising by ST Media Group International, Incorporated

SEMESTER II

HTC2 L02 ADVANCED PATTERN ADAPTATION AND CONSTRUCTION TECHNIQUES (PRACTICAL)

Hours per week-6 **Credit 4**

Objectives:

1. To understand the different methods of pattern making- viz. Drafting, Flat pattern, Draping.
2. To develop the skill and ability to design and develop draft patterns for different garments based on body measurements and adaptations.
3. To develop skills in handling different fabrics, embellishments and quality of finishing of garments

Sl No	Course Outcome	Pos/ PSOs	CL	KC	Class Sessions	Lab/ Field study
C01	understand pattern making tools & techniques	**PSO3**	U	P		2
C02	understand the different methods of pattern drafting	**PSO3**	U	P		15
C03	understand the basic pattern to develop pattern adaptation	**PSO3**	U	P		18
C04	Develop skill and ability to design draft patterns for different garments based on body measurements and adaptation	**PSO3**	C	C		20
C05	Develop skills to draft adult basic block and adaptations	**PSO3**	C	P		18
C06	Develop the skill to design garments according to the theme	**PSO3**	C	C		5
C07	Develop the garment construction skills according to the pattern	**PSO3**	C	C		15
C08	Assess, propose, & apply various techniques related to drafting, draping and constructing of garments	**PSO3**	E	M		15
Total hours of Instruction						108

UNIT I

PATTERN ADAPTATION

Bodice- dart transfer- one dart to two dart, princess seams, one dart to three dart

Yokes

Sleeves- puff, flutter, tubular, tulip, kimono, raglan

Skirts- gathered, A-line, flare, circular, cowl/ pegtop

Neckline- raised and cowl

Pants-capri

UNIT II

GARMENT CONSTRUCTION

Drafting of adult basic block- bodice, skirt, sleeve

Construct garments using following theme - Ethnic wear or Party wear

• Salwar / Chudidar and Kameez / Kurta or

• Chaniya Choli

Western or Indo-Western outfit

• Trousers and Top or

• Skirt and Top or

• Dress/ gown

REFERENCES:

1. Practical Dress Design-Erwin, Mable, New York, Macmillan Co., 1964.

2. A Tailoring Manual-Strickland Gertue, New York, Macmillan, 1976.

3. Easy Cutting-Juvekar, W.B.

4. System of cutting-Zarapkar, K.R., Bombay, Zarapkar Tailoring College.

5. Basic Fashion Design-Ireland, Patrick, London, B.T. Batsford Ltd., 1972.

6. Reader's Digest Complete Guide to Sewing, Reader's Digest Association, 1982.

7. Pattern Making for Fashion Designing-Armstrong, H. (1987), New York Harpes

SEMESTER II

HTC2C08- TECHNICAL TEXTILES

Hours per week-5 **Credit: 4**

Objectives:

1. To familiarize the students with technical textiles and its future prospects.
2. To acquaint the students with technical fibers, yarns and fabric structure.
3. To familiarize student with various application of technical textiles.

	Course Outcomes	**PSO**	**CL**	**KC**	**Class Sessions**	**Lab Sessions/ Field Study**
CO1	Identify the opportunities to develop a product on a market.	**POS8/ PSO1**	AP	M	10	
CO2	Analyses various technical textile products in order to recognize the manufacturing process.	**POS8/ PSO2**	A	P	12	
CO3	Understand the impact of the fibre characteristics and used technologies on the technical textile products.	**POS5/ PSO3**	U	F	10	
CO4	Select the textile elements and manufacturing processes to design the final product for end use	**POS6/ POS5**	R	P	25	
CO5	Identifying major segments of the textile industry and distribution channel.	**POS5/ POS2**	C	C	15	
Total hours of Instruction					72	

UNIT I

Introduction, Definition, Scope & Development. Processes, Applications, Globalizations, Future prospects of technical textile industry

UNIT II

Brief introduction to Technical fibers and yarns- Conventional and New developed fibers and yarns and their applications

UNIT III

Technical Fabric Structures a) Brief study of woven and knitted fabrics b) Detailed study of Non woven structure –Introduction, methods of batt production, different methods of web laying, flash spinning, melt blown, different methods of bonding, Hydro entanglement process. Finishing of Technical Textiles- Introduction, Processes, Mechanical, Heat setting and Chemical process

UNIT IV

Brief introduction to Textile Reinforced – Composite material,Smart Textiles,Nano tech in textiles-Nano fibres & Nano finishes.

UNIT V

Application of Technical Textiles – Meditech, Agrotech, Mobiltech, Buildtech, Clothtech, Geotech, Homtech, Indutech, Oekotech, Packtech, Protech, Sporttech.

REFERENCES:

1. Handbook of Technical Textiles – Edited by A R Horlocks and S C Anand.
2. Technical Textiles – C Byrne, Textiles Marg issue 2.95, 1995.
3. Specialty Fibers for Technical Textiles – J E Mcintyre, Dept. of Textile Industry University of Leeds.
4. Handbook of Textile Fibers, Manmade Fibers – JG Cook, 5th edition, Merrow 1984.
5. Woven Cloth Construction – AT Robinson and R Marsh, The Textile Institute Manchester, 1973

6. Contribution of Knitting to Current & Future Developments in Technical Textiles- S C Anand, Conference of Technical Textiles Group, The Textile Institute ,Manchester, 1988
7. Production & Properties of Non – Woven – A Newton & J E Ford, Textile progression,1973.
8. Developments in Non – woven fabrics – A T Purdy, Textile Progression, 1980.
9. Coated Fabrics – K Krishna J 1995.
10. Coated Fabrics – F Bohin et al., 1998.
11. An Introduction to Composite Materials – M G Bader, University of Surrey 1997
12. Composite Materials: Engineering and Science – F L Mathews & R Rawlings, Chapman and Hall, London 1994
13. Coated Fabrics – S J Krishnan, 1991
14. Related Published bound book of papers from SASMIRA & BTRA

SEMESTER - III

HTC3C09 FABRIC CONSRUCTION AND ANALYSIS

Hours per week-6 **Credit: 4**

Objectives:

1. To help students to understand the different yarn numbering systems and weaving calculations.

2. To enable the students to gain knowledge of different weaving machines and weaving mechanism.

3. To acquire knowledge of the different types of fabric structures and design and be able to prepare woven designs with suitable draft and peg plan.

4. To enable the students to analyze different types of weave patterns

5. To learn the principles of creating different colour and weave effects in weaving.

6. To learn to set the sample looms and weave different designs

Sl No	Course Outcome	Pos/ PSOs	CL	KC	Class Sessions	Lab/ Field study
C01	Demonstrate the weaving, weaving loom, weaving mechanism & different weaving mechinaneries	**PSO4**	Ap	P	10	
C02	Identifying & applying the weave pattern – design, draft, peg plan, denting order	**PSO4**	Ap		14	
C03	Analyze the weaving calculations and different types of weave pattern	**PSO4**	An	P	20	
C04	Create different weave effects in weaving	**PSO4**	C	P	10	
C05	Understand basic weaves & fancy weaves	**PSO4**	U	P	35	
C06	Identify different woven samples	**PSO4**	An	P	19	
Total hours of Instruction					108	

UNIT I

Weaving- Looms – Brief introduction to working of the following looms – Tappet, Dobby, Jacquard, Shuttle less looms (projectile, rapier, water jet, air jet and circular loom), 3D weaving .Basic operations in weaving (Shedding, picking, beating, take up, let off), Drawing in knotting and denting plans.

Elements of Woven Design – Weave repeat unit, Construction of drafts and lifting plans, Relation between design, Draft and lifting plan, Construction of drafts and lifting plans from the design, Systems of drafting, Heald calculation.

UNIT II

Elementary Weaves

Plain Weave – Introduction, Classification of plain cloth,

Derivatives - Warp rib weave, weft rib weave, matt, Ornamentation of plain weave

Twill weave – Introduction, Balance and unbalance twill, angle of twill, Weaves constructed on twill bases- Herringbone twill, broken twill, transposed twill, elongated twill, diamond twill and pointed twill

Sateen and satin weaves – General characteristics, regular and irregular sateens and satin

UNIT III

Other weaves – Diamonds and Diapers, Crepe, Honeycomb, Huckaback, Mockleno, Brightons Honeycomb, Bedford cord, Welts and Pique

Extra weft and extra warp figuring effects

Lappet and swivel figured fabrics

Pile weaves- warp pile,weft pile

Leno/Gauze , Damask, Double cloth

Related experience

Analysis of different woven samples studied in theory for design, repeat, draft, peg plan and other details on inch graph paper

REFERENCES:

1. Watson Textile Design and Colour– Grosicki, Z.J, Newness Butter Worths.

2. Advance Textile Design –William Watson , Longmans Green and Co. Ltd.

3. Grammar of textile Design- Nisbet H., Taraporewale Sons and Co., Bombay.

4. Weaving Mechanisms – K.T. Aswani Mahajan Book Distributors, Ahmedabad.

5. Weaving Calculations – R. Sengupta, Taraporewale Sons and Co., Bombay

6. Woven Cloth Construction – Robinson and Mark, Butter Worth and Co.Ltd, London.

7. Elements of Weaving – Thorpe, Azaba, Doubleday and Co. New York

8. Modern Weaving – Singh R. H., Mahanjan Book Distributors, Ahmedabad.

9. Weaving Technology – Kulkarni M.M., Virinda, Publication, Jalgaon.

10. Yarn and Cloth Calculation. – Amalsar D.M

11. Handloom Weaving –Amalsar D.M.

12. Fabric Structure and Cloth Analysis -Amalsar D.M.

13. Geotextiles Handbook – T.S. Ingold and K. S. Miller, Thomas Telford

14. Textiles – Fibre to Fabric - B. P. Corbman

15. Textiles 3rd edition - N. Hollen and J.Saddler

SEMESTER III

HTC3C10 INTERNSHIP/ JOB TRAINING

Hours per week: 4 **Credit: 4**

Objectives:

1. To get an exposure to the working situation in the industry.
2. To develop skills of entrepreneurship management.
3. To develop aptitude through experiential learning:

a) **One month internship in a reputed export house/boutique/a firm of student's choice.**
b) **Report to be produced.**

SEMESTER III

HTC3C11 TEXTILE CHEMISTRY

Hours per week-6 **Credit 4**

Objectives:

1. To be acquainted with the polymers of which the textile fibers are made.

2. To familiarize with the principles of chemical processing i.e. from preparatory process to finishing of textiles

3. To understand the chemistry, production and fundamental properties of natural and synthetic dyes

	Course Outcome	**POs/ PSOs**	**CL**	**KC**	**Class Sessions**	**Lab/ Field study**
CO1	Recall fundamental organic chemistry	PSO 5	R	F	6	
CO2	Estimate different types of chemicals used in textile wet processing	PO1	E	C,P	11	4
CO3	Identify dyes and estimate purity of dye solution and explain the mechanics of dyeing	PSO 5	Ap, U	P,F, C	11	18
CO4	Identify various machinery used for printing & finishing of fabrics which would help them in working in dyeing/printing industry	PSO 5	Ap	P	11	11
CO5	Understand color theories, different measures of color and specifications	PSO 7	U	F	14	11
CO6	Understand the coloration of synthetic/ natural fibers	PS0 7	U		15	10
CO7	Infer the principle and method of application of various types of special finishes on textile fabrics	PSO 5	U	M	8	10
CO8	Recommend eco-friendly practices in textile processing	PSO 5	E,A p	M,P	14	12
C09	Apply sustainable practices related to textile issues	PO5	A		10	
CO10	Propose research and development in the field of textile auxiliaries/dyeing/printing	PSO 6	C	M	8	14
Total hours of Instruction					108	90

UNIT I POLYMER CHEMISTRY

Definition of Polymers, its types, degree and methods of polymerisation, polymerisation process, molecular weights of polymers and its determination. Orientation and crystallinity of fiber molecules; their influence on the fibre properties

UNIT II DYES

History of dyestuffs, light, color, dyestuffs, Structure & Use wise classification of dyes

Color – Beer's law and lambert's law, colour mixing system, colour order system, CIE color specification, Instruments for the measurement of color, Kubelka-Munk Theory, Relation between K-S & concentration of colourant, understanding Color difference, Hue, Chroma, etc. Understanding the use of Color Index Standards, dye shade cards and pantone colour coding.Commercial dyes. Introduction on Banned dyes

UNIT III AUXILIARIES: (DYEING & PRINTING)

Chemical composition and properties of wetting agent, softeners (anionic, cationic and non-ionic), detergents, leveling agents, carriers, bleaching agents, thickeners, binders, eco-friendly chemicals.

UNIT IV PROCESSING

Brief introduction to Preparatory Processes - Singeing, Desizing, Scouring, Bleaching and Mercerization.

Dyeing – Principles of Dyeing and Mechanism of dyes like – like direct, reactive, vat, azoic, sulphur, basic, acid, disperse and natural dyes.

Printing – Principles of printing, printing using dyes and pigments on - (silk, cotton, Polyester, & blends); fixation of prints using various methods, Innovative Printing methods.Introduction to Post Treatment of dyed, printed and finished fabrics. (Soaping, rinsing, washing and fixation).

UNIT V TEXTILES AND ENVIRONMENT

Impacts due to processing, alternatives used in processing, ecolabels and Ecofriendly practices, smart textiles. Sanitizing dye stuff, German Ban

REFERENCES:

1. Technology of Textile Processing - Shenai, V.A. (1984), Vol.- IX, Sevak Publication
2. Hand Book of Textile Fibers - Cook, J. Gordon, Merrow Publishing Co. Ltd, England
3. Manmade Fibers - Moncrief: R.W, John Wiley & Sons New York.
4. Dyeing and Chemical technology of Textile Fibers - Trotman, E.R. (1975), Charles Griffino Company Ltd, London.
5. An Introduction to Textile Finishing - Marsh, J.T. (1979), B. I. Publications.
6. Chemicals after Treatment of Textiles - Mark H., Wooding N.S. & Atlas Smeeds, (1970), John Wiley & Sons Inc., NY.
7. Handbook of fiber Science and Technology, Vol. II, Chemical Process of Fibres and Fabrics, Functional Finishes Part A - Lewin, M. and Selio, Stephen B. (1983) Marcel Deker, Inc, NY and Basel.
8. Introduction to the Chemistry of Dyestuffs-Shenai, V. A (1991):, Sevak Prakashan
9. Natural Dyes and their Application to Textiles, Gulrajani M.L. and Gupta, D. (1982), IIT Delhi.
10. Natural dyeing process of India-Mohanty, Chandramouli, Naik, (1987), Ahmedabad, Calico Museum of Textiles.
11. India Horti business on line. http:/www.agroindia.org/1HOL
12. Technology of Finishing-Shenai, V.A. and Saraf, N.M. (1990),Vol. X.II Edition
13. Fundamental Principles of Textile Processing-Shenai.V.A (1984); Vol. IX, I Edition, Sevak Pub
14. Evaluation of Textile Chemicals-Shenai, V.A and Mehra, R.H. (1984); Vol.VIII, Sevak Pub
15. Technology of Dyeing-Shenai, V.A. (1988); Vol. VI, Sevak Pub

16. Technology of Dyeing-Shenai, V.A. (1984) Vol.I, Edition III, Sevak Pub.
17. Chemistry of Dyes & Principles of Dyes-Shenai, V.A (1987); Vol.III, Edition III, Sevak Pub
18. Textile Fibers-Shenai, V.A (1990); Vol. I, Edition III, Sevak Pub
19. Chemistry of Organic Textile Chemicals-Shenai, V.A and Saraf, N.M., Sevak Pub
20. History of Textile Design-Shenai, V.A. (1988), Sevak Pub

ELECTIVE COURSES

SEMESTER III

HTC3E0I FASHION CHOREOGRAPHY

Hours per week: 3 **Credit: 4**

Objectives:

1. To develop managerial and the Fashion presentation skills of the students
2. To enable students organize fashion shows

Sl No	Course Outcome	Pos/ PSOs	CL	KC	Class Sessions	Lab/ Field study
C01	Understand various steps in planning a show	**PSO1**	E	C	10	
C02	Understand the technical framework and sound check of fashion show	**PSO1**	U	P	5	
C03	Organize fashion show	**PSO1**	E	C	10	
C04	Understand different techniques for advertising and promotional activities	**PSO1**	U	P	10	
C05	Develop the fashion presentation skill	**PSO1**	E	M	9	
C06	Develop the managerial skills	**PSO1**	E	M	10	
Total hours of Instruction					54	

UNIT I

Fashion shows- history and origin, importance, types

UNIT II

Steps in planning a show, technical framework, Lighting and Sound

UNIT III

Advertising and promotional activities

UNIT IV

Choreography, Opening the show, Pace, Pivots and Pauses, Mapping, Dancing,

Model groups, Finale, Importance of choreography

Related experience:

Organize a fashion show

REFERENCES

1. Guide To Producing A Fashion Show, second edition, Judith C Everett, Kristen K Swanson, Fairchild Publications, Inc, New York
2. Silent Selling: Best Practices and Effective Strategies in Visual Merchandising 4th Edition Judith Bell, Kate Ternus

SEMESTER III

HTC3 E01 FASHION COMMUNICATION

Hours per week: 3 **Credit: 4**

Objectives:

1. To develop communication skills in fashion promotion
2. To enable students understand the importance of fashion journalism

Sl No	Course Outcome	Pos/ PSOs	CL	KC	Class Sessions	Lab/ Field study
C01	Understand various media in communication	**PSO1**	E	C	10	
C02	Understand the technical framework and need for fashion communication	**PSO1**	U	P	5	
C03	Develop skills in fashion writing	**PSO1**	E	C	10	
C04	Understand different techniques of visual communication	**PSO1**	U	P	10	
C05	Develop the fashion communication skill	**PSO1**	E	M	9	
C06	Identify the media ethics for better work culture	**PSO1**	E	M	10	
Total hours of Instruction					54	

UNIT – I

I. Fashion and the communication process: What is Fashion ?

The Theories of fashion adoption need for promotion of fashion, need for the communication process, communication through different media.

II. Written Communication:

Fashion writing, creative writing reporting features, editing and printing techniques, image management and advertising, public relations, press laws and media ethics.

UNIT – II

III. Visual Communication:

Visual merchandising and display, fashion photographs, fashion shows and multimedia.

IV. Communication in practice

Scripting shows, conducting interviews, reporting events, fashion critics, planning PR campaigns, formulating case studies, designing catalogues and brochures, layouts for stands in exhibition. Visualisation of décor and ambience, preparing short films and audiovisuals, choreography of fashion event.

References :

1. Farbey, A.D. : How to Produce Successful Advertising, Kogan Page India Pvt. Ltd.
2. Jethwaney, J.N. (1999) : Advertising, Phoenix Publishing House Pvt. Ltd.
3. Roundy, N. and Mair, D. (1985) : Strategies for Technical Communication, Little Brown and Company, Boston, Toranto.
4. Verne E. Edwards , WMCBrown Journalism : in a free society
5. Charles S Steinberg, Mass Media and Communication - HastingsHouse, New York

SEMESTER III

HTC3E01 SOCIOLOGY OF CLOTHING

Hours per week: 3 **Credit: 4**

Objectives:

1. To understand the relationship of clothing and the society
2. To know the importance of clothing in social life

Sl No	Course Outcome	PSOs	CL	KC	Class Sessions	Lab/ Field study
CO1	Categorize the evolution of clothing through the theories of	PSO1	An	C	9	
CO2	Discover the sociological aspects of clothing	PSO1	An	C	6	
CO3	Compare the personality factors and choices of clothing	PSO1	U	F,C	5	
CO4	Develop the skills in selecting clothing for different age group	PSO2	Ap	P	5	
CO5	Distinguish the fashion and social visibility and Outlining the theoretical perspectives of fashion	PSO4	An	C	7	
					54	
Sl No					**Course Outcome**	**PSOs**

UNIT I

Origin of Clothing

Theories of clothing – theory of modesty, immodesty, protections,

adornment, combined need theory, other theories in fashion.

Relation between clothing and other disciplines.

(a) Physical Health (b) Mental Health

Clothing and first impressions.

UNIT II

Relation between clothing and the wearer

(i) Personality and self concept.

(ii) Motivation in clothing choices.

Individual values, interests and attitudes related to clothing.

Behaviour and clothing choices, practices and effect and clothing on the individual.

UNIT III

Clothing and Society.

Clothing and social behavior

Clothing influenced by religion and culture.

Clothes and conformity

Clothes and occupation

UNIT IV

Selection of clothing for various age group

Uniforms in schools and college.

REFERENCES:

1. Avis, M. Dry (1961): The Psychology of Jung, Methuen & Co., London.

2. Horn, Marilyu J. (1968): The Second Skin, Houghton Miffin Co., USA.

3. Flugel, J.C. (1950): The psycho – analytical study of the family, The Hograth Press & the Institute of Psycho Analysis, London.

4. Richard Wollhein (1985): Frend, Fontana Press, London.

5. Vincent Brome (1978): Jung, Granada Publishing, London, Toronto Sydney, New York.

SEMESTER III

HTC3E02(1) TEXTILES AND ENVIRONMENT

Hours per week: 5 **Credit: 4**

Objectives:

1. **To understand the environmental effects of the textile industry**
2. **To develop an Ecofriendly attitude in consumerism**

Sl No	Course Outcome	Pos/ PSOs	CL	KC	Class Sessions	Lab/ Field study
Co1	Identify the Indian textile industry	**Pos 5/Psos5**	AP	F	10	
Co 2	Analyze the environmental impacts of Indian textile Industry	**Pos 5/ Psos 5**	AN	C	10	
Co 3	Explain the use of Biotechnology in textile wet processing	**Pos 5/ Psos 5**	U	C	20	
Co 4	Classify the types of ecolabels	**Pos 5/ Psos 5**	U	F	10	
Co 5	Identify the ecofriendly fibres and analyze the ecofriendly practices for fabric care	**Pos 5/ Psos 5**	AP	C	20	
Co 6	Understand the various novel fibres	**Pos 5/ Psos 5**	R	F	10	
Co 8	Compare the difference between organic and conventional textile fibres	**Pos 5/**	U	C	10	

		Psos 5				
Total hours of Instruction					90	

UNIT I

Indian textile industry-introduction, economic growth, over view

UNIT II

Environmental impacts- production, processing, transportation, use and care, child labour

Eco factors, ethical issues

UNIT III

Ecofriendly practices, ecofriendly fibers (hemp,jute,ramie,bamboo.pineapple leaf,mulberry, banana, novel fibers – spider silk, bacterial cellulose, corn fibers, fortrell ecospun).organic cotton- production, significance, difference between organic and conventional cotton, market potential, limitations.

Fabric care- Ecofriendly practices

Ecoparameters-German ban(direct ,azo),sensitizing dye stuff

UNIT IV

Use of biotechnology :

1. Textile processing
2. Ecofriendly fibers- transgenic cotton, coloured cotton, hybrid cotton, biofabrics
3. Use of enzymes

UNIT V

Eco labeling-introduction, types, aims, criteria, ecolabelling and international scenario, types of ecolabels.

REFERENCES

1. Dr. David C. Innes. “What do your clothes say about you?” (1993).
2. Lurie, Alison,The language of clothes,New York:Random house,1981
3. Blackburn,R.S (2009) “Sustainable Textiles:life cycle and environmental impact, woodhead textile series No98, Woodhead publishing LtD.UK.
4. Bomburg.N (2010) “Sustainability in performance apparel:Meeting the demands on eco conscious market place, Woodhead publishing LtD.UK.

SEMESTER III

HTC3E02(2) SCIENCE OF CLOTHING COMFORT

Hours per week: 5 **Credit: 4**

Objectives:

- To understand the basic Comfort aspects of textile materials
- To enable students to stimulate the minds of innovation, product design and development with scientific approaches

Sl No	Course Outcome	Pos/ PSOs	CL	KC	Class Sessions	Lab/ Field study
C01	Understand the importance of clothing comfort	**PSO1**	E	C	15	
C02	Understand the factors affecting clothing confort	**PSO1**	U	P	15	
C03	Identify the neuropsychological factors related to clothing comfort	**PSO1**	E	C	15	
C04	Establish the relationship between garment fit and clothing comfort	**PSO1**	U	P	15	
C05	Develop a scientific approach towards selection of clothing	**PSO1**	E	M	15	
C06	Understand the psychological aspects of clothing in relation to its comfort	**PSO1**	E	M	15	
Total hours of Instruction					90	

UNIT I

Introduction to Clothing comfort- Need and selection of clothing, basic elements of clothing comfort, Human clothing interactions. Psychology and comfort- Psycho-physiological factors, psychophysics and clothing comfort, laws of psychophysics, wear trial techniques

UNIT II

Neurophysiological processes in Clothing comfort- Neurophysiological perceptions, Mechanical and thermal receptors, Physiological requirements of human body. Textile aspects of clothing comfort- Tactile comfort sensations, Assessment of fabric handle characteristics.

UNIT III

Thermal transmission- Thermal distress, thermal comfort of clothing, Parameters of expressing thermal characteristics , Moisture transmission- Liquid water transfer, Principles of moisture vapour transfer, Moisture sensation in clothing

UNIT IV

Dynamic heat and Mass transmission- factors affecting heat and mass transfer through fabrics, evaluation of heat and mass transmission, parameters expressing heat and mass transmission. Garment fit and comfort- Body dimensions and pattern, Garment fit and comfort relationship.

REFERENCES

1.Science in Clothing Comfort, Apurba Das and R. Alagirusamy, Woodhead Publishing India Ltd., 2010

2. K. Slater, The Thermal Behaviour of Textiles, Textile Progress, Vol.8, No. 3, 1976

3. K. Slater, Comfort Properties of Textiles, Textile Progress, Vol. 9, No. 4, 1977

4. Y. Li, The Science of Clothing Comfort, Textile Progress, Vol. 31, No. 1 & 2, 2001

5. Patnaik et. al., Wetting and Wicking in Fibrous Materials, Textile Progress, Vol. 38, No. 1, 2008

6. M. Yoneda and S. Kawabata, Analysis of Transient Heat Conduction and its Application-Part I, J. Text. Mach. Soc. of Japan, Vol. 29, No. 4, 1983, 73.

7. Thermal and moisture transport in fibrous materials, edited by N. Pan and P. Gibson, The Textile Institute, Published by woodhead Publishing Limited, Cambridge, England, 2006

8. Quality control: Fabric comfort – V. K. Kothari.

SEMESTER III

HTC3E02(3) TESTING OF FUNCTIONAL AND TECHNICAL TEXTILES

Hours per week: 5 **Credit: 4**

Objectives:

- To understand the detailed testing methods and analysis of low stress mechanical and transmission (heat and moisture) characteristics of functional textiles.
- To understand the testing of functional and technical textile materials

Sl No	Course Outcome	Pos/ PSOs	CL	KC	Class Sessions	Lab/ Field study
C01	Understand the properties of functional and technical textiles	**PSO1**	E	C	15	
C02	Understand the objectives of testing functional textiles	**PSO1**	U	P	15	
C03	Understand the finishing procedures used to treat technical textiles	**PSO1**	E	C	15	
C04	Understand the various test methods used for technical textiles	**PSO1**	U	P	15	
C05	Identify the end use of functional textiles	**PSO1**	E	M	15	
CO6	Understand the principles of testing	**PSO1**	U	C	15	
Total hours of Instruction					90	

UNIT I

Objectives of Testing of Functional and Technical Textiles, Testing of Fabric Handle Characteristics Subjective assessment Objective assessment KESF and FAST methods Nozzle extraction principle

UNIT II

Testing of Transmission characteristics Moisture transmission (Vapour form and Liquid form) Thermal transmission.

UNIT III

Testing of extreme heat, fire and cold protective clothing, Testing of geo-textiles, Testing of filter fabrics, Testing of fibre reinforced composites

UNIT IV

Testing of electromagnetic shielding textiles, Testing of compression bandages, Testing of ballistic protective textiles, Testing of UV protective textiles, Special Testing for Nonwoven and Technical Textiles

REFERENCES

Physical Testing of Textiles by B. P. Saville, 1999,Woodhead Publishing Ltd., U. K.

- Principles of Textile Testing by J. E. Booth, 1961,Heywood Books, London
- Testing and Quality Management – Edited by V. K.Kothari, IAFL Publications, New Delhi
- BIS, BS, ASTM and other standard methods of textiletesting
- Science in Clothing Comfort, Apurba Das and R.Alagirusamy, Woodhead Publishing India Ltd., 2010.
- K. Slater, The Thermal Behaviour of Textiles, Textile Progress, Vol. 8, No. 3, 1976.
- K. Slater, Comfort Properties of Textiles, Textile Progress, Vol. 9, No. 4, 1977
- Handbook of Technical Textiles, Edited by A R Horrocksand S C Anand, The Textile Institute, CRC Press
- Wellington Sears Handbook of Technical Textiles, SabitAdanur, Technomic Publishing Co. Inc.
- Handbook of fibre rope technology, H A McKenna, J WS Hearle and N O'Hear, The Textile Institute, CRC Press11. Online sources on testing of technical textiles

SEMESTER IV

SEMESTER IV

HTC4 L03- QUALITY ASSURANCE AND TEXTILE TESTING (PRACTICALS)

Hours per week-5 **Credit 4**

Objectives:

1. To develop an understanding of methods and techniques used to analyse textile fibers, yarns and fabrics for end use performance
2. To acquire knowledge and understanding of various structural properties of textiles and relate them to end use fabric performance and product
3. To familiarize students with the different testing equipments, their underlying
4. principles and the international accepted standards, test methods and the language of measurement
5. To be able to analyze and interpret the results and predict the general textile behavior performance
6. To develop understanding of the importance of quality control in textile testing

EXPERIMENTS

1. Determination of yarn counts of the given yarn packages by Beasley's balance
2. Determination of crimp percentage,
3. Determination of twist in a yarn
4. Determination of GSM of the given sample using quadrant balance
5. Determination of ends and picks per inch of the given fabric
6. Determination of breaking load of a woven textile, material by raveled strip method on an electronic tensile strength test.
7. Determination of tear strength of fabric by Elmendorf tear tester
8. Determination of bursting strength of woven fabric using the diaphragm method
9. Determination of stiffness of fabric by cantilever test
10. Determination of wrinkle recovery
11. Determination of abrassion resistance on martindale abrassion tester
12. Assessment of fabric drape
13. Determination pilling resistance of fabric by tumble type pilling tester
14. Determination of colour fastness of textile material to rubbing

15. Determination of colour fastness to washing in launderometer
16. Determination of water repellency of fabrics by water spray test

REFERENCES:

1. Principles of Textile Testing – J.E.Booth, Newness Butterworth, London

2. Textile Testing and Analysis – Billie J. Collier and Helen E. Epps, Prentice Hall, New

Jersey

3. Textile Testing – John H. Skinkle, Brooklyn, New York

4. Handbook of Textile Testing and Quality Control – Groover and Hamby

5. An Introduction to Quality Control for Apparel Industry – Pradip V. Mehta, Marcel

Dekker, New York

6. Textile Objective measurement Automation in Garment Manufacture – George

Stylios – Ellis Horwood Ltd, England

7. Knitted Clothing Technology – Brackenbury Terry, Blackwell Science Ltd

8. Textile Testing & Quality Control Standards like – BIS, BS, ASTM, ISO, AATCC,

SEMESTER IV

HTC4L04 TEXTILE CHEMISTRY

(PRACTICAL)

Hours per week-5 **Credit: 4**

Objectives:

1**.** To be acquainted with the polymers of which the textile fibers are made.

2. To familiarize with the principles of chemical processing i.e. from preparatory process to finishing of textiles

3. To understand the chemistry, production and fundamental properties of natural and synthetic dyes.

EXPERIMENTS

1. Qualitative analysis – Identification of fibers – cotton, polyester, viscose, polyamide, polyester, silk, wool, jute. Use of burning, microscopic, chemical tests.

2. Analysis of binary blends

3. Desizing, scouring and bleaching of grey fabric using chemical and eco-friendly agents

4. Dyeing of cotton with direct dye, vat dye, reactive dye

5. Dyeing of wool and silk with acid dye

6. Dyeing of nylon with acid/metal complex dye,

7. Use of natural dyes and mordants (Synthetic & natural) to dye cotton and silk

8. Identification of dyes, direct, reactive, azo, vat, sulphur, acid and disperse dyes on fabrics.

REFERENCES:

1. Technology of Textile Processing – Shenai, V.A. (1984), Vol.- IX, Sevak Publication
2. Hand Book of Textile Fibers – Cook, J. Gordon, Merrow Publishing Co. Ltd, England
3. Manmade Fibers – Moncrief: R.W, John Wiley & Sons New York.
4. Dyeing and Chemical technology of Textile Fibers – Trotman, E.R. (1975), Charles Griffino Company Ltd, London.
5. An Introduction to Textile Finishing – Marsh, J.T. (1979), B. I. Publications.
6. Chemicals after Treatment of Textiles – Mark H., Wooding N.S. & Atlas Smeeds, (1970), John Wiley & Sons Inc., NY.
7. Handbook of fiber Science and Technology, Vol. II, Chemical Process of I and Fabrics, Functional Finishes Part A – Lewin, M. and Selio, Stephen B. (1983) Marcel Deker, Inc, NY and Basel.
8. Introduction to the Chemistry of Dyestuffs-Shenai, V. A (1991):, Sevak Prakashan
9. Natural Dyes and their Application to Textiles, Gulrajani M.L. and Gupta, D. (1982), IIT Delhi.
10. Natural dyeing process of India-Mohanty, Chandramouli, Naik, (1987), Ahmedabad, Calico Museum of Textiles.
11. India Horti business on line. http:/www.agroindia.org/1HOL
12. Technology of Finishing-Shenai, V.A. and Saraf, N.M. (1990),Vol. X.II Edition
13. Fundamental Principles of Textile Processing-Shenai.V.A (1984); Vol. IX, I Edition, Sevak Pub
14. Evaluation of Textile Chemicals-Shenai, V.A and Mehra, R.H. (1984); Vol.VIII, Sevak Pub

15. Technology of Dyeing-Shenai, V.A. (1988); Vol. VI, Sevak Pub
16. Technology of Dyeing-Shenai, V.A. (1984) Vol.I, Edition III, Sevak Pub.
17. Chemistry of Dyes & Principles of Dyes-Shenai, V.A (1987); Vol.III, Edition III, Sevak Pub
18. Textile Fibers-Shenai, V.A (1990); Vol. I, Edition III, Sevak Pub
19. Chemistry of Organic Textile Chemicals-Shenai, V.A and Saraf, N.M., Sevak Pub
20. History of Textile Design-Shenai, V.A. (1988), Sevak Pub

ELECTIVE COURSES

SEMESTER IV

HTC4E03(1) HOME TEXTILES

Hours per week: 5 **Credit: 4**

Objectives:

1. To aquaint the students to various home furnishings
2. To help them know the criteria for selection of home textiles
3. To be aware of the latest trends in home textiles

Sl No	Course Outcome	Pos/ PSOs	CL	KC	Class Sessions	Lab/ Field study
C01	Understand various types of Home Textiles	**PSO1**	E	C	15	
C02	Understand the need of Home Textiles in different settings	**PSO1**	U	P	15	
C03	Identify the recent trends in Home Textiles	**PSO1**	E	C	15	
C04	Understand the properties of home textile products	**PSO1**	U	P	15	
C05	Develop innovative home textile products	**PSO1**	E	M	15	
C06	Develop entrepreneurial skills in this field	**PSO1**	E	M	15	
Total hours of Instruction					90	

UNIT I:

Introduction to Home Textiles

• Definition

• Types of Home textiles (Woven and non-wovens)

• Factors influencing selection of Home Textiles

• Recent trends in Home Textiles

UNIT II:

Floor and wall coverings
• Definition of floor covering
• Types of floor covering - hard, soft, and resilient floor coverings
• Uses and care of floor covering
• Definition of wall covering
• Uses and care of wall coverings

UNIT III:

Door and window treatments
• Definition and parts of Door and Windows
• Definition - Curtains and Draperies
• Materials used for Curtains and Draperies
• Types of curtains - Draw, tailored, pleated, cafe curtains, three tire curtains
• Type of draperies - swags
• Accessories - rods hook, rails, racks, curtain tape pins

UNIT IV:

Soft furnishing. For living and Bedroom
• Definition for Living and Bedroom linens
• Types of living and bedroom linens
• Sofa, sofa covers
• Wall hangings
• Cushion/cushion covers
• Upholsteries
• Bolster and bolster covers
• Bed sheets, covers
• Blankets, blanket covers
• Comfort and comfort covers
• Bed spreads
• Mattress and mattress covers
• Pillow and pillow covers
• Pads
• Uses and care advantages and disadvantages

UNIT V:

Soft furnishing. for Kitchen, Dining and Bathroom
• Definition

• Types of kitchen linens
• Dish cloth, hand towels
• Definition for dinning
• Bathroom linens - types
• Factors affecting the selection of table and bathroom linens
• Use and care

REFERENCES:

1. Cheryl Mendelson, Home Comforts the Art and Science Keeping house Published by Scriber, New York. 2005.
2. Hanlyn octopus, Cushions and Pillows- Professional Skills made easy, Octopus Publishing group – New York, 2001.
3. Magi Mc McCormick Gordon, the Ultimate Sewing Book 200 sewing ideas for you & your home. Collins & Brown, London, 2002.
4. Anne van Wagner Childs Leisure Arts- Inc., Sew- no- more Home Décor ,Arkansas, U.S.A,1993.
5. Mary Mulasi, Garments with style, Chiton Book Company,Pennsylvania,1995.

SEMESTER IV

HTC4E03(2)COMPUTER APPLICATION IN FASHION DESIGNING

Hours per week-5 **Credit: 4**

Objectives:

1. To enable students to handle tools of Adobe Illustrator & Photoshop to create fashion and design Illustration.

Sl No	Course Outcome	Pos/ PSOs	CL	KC	Class Sessions	Lab/ Field study
C01	Illustrate accurate representations of garment specifications for communication purposes	PSO1	U	F,P	15	
C02	Develop skills to choose a variety of design softwares for visual communication of designs	PSO3	R/ U	P	15	
C03	Design and produce innovative designs using CAD softwares	PSO5	C	P	10	
C04	Determine suitable file formats for digital outputs	PSO5	E	C,P	10	
C05	Develop skills to Construct digital files using appropriate processes and techniques	PSO3	C	P	10	
C06	Make use of audio/visual aids to popularize the work done in designing	PSO1	Ap	F,C	10	
CO 7	Construct innovative garment designs	PSO5	C	P	10	
CO 8	Infer the advantages of 3D techniques in designing and production processes	PSO4	U	M	10	
Total hours of Instruction					90	

Unit I

Adobe Illustrator:

Introduction to Vector Graphic and Bitmap Graphic.

Opening, closing and saving a file.

Tool Box

Grids and Guideline

Ruler Setting

Paths – With all options

Importing and Exporting

Printing a document

Filters

Layers

All Menus

Unit-II

Adobe Photoshop

Introduction: Vector Graphic and Bitmap Graphic.

Opening, closing and saving a file.

Tool Box

Importing and Exporting

Printing a document

Image size and Resolution

Colour Palettes

UNIT III:

Computer aided garment designing

Tools and Techniques

Sketching different types of garments.

Pattern creation of Children's, women's and men's garments.

Pattern grading for Children's, women's and men's garments.

Marker efficiency

Lay Planning

Fashion Studio – Utility and tools.

Children's, women's and men's garments.

UNIT IV

Introduction to Color Modes

Working with different color models and modes, Using

custom colors, Picking colors, Analyzing and editing colors, Looking at gamut issues, Creating duotones, Setting color balance, Setting hue and saturation, Adjusting brightness and contrast, Working with histograms, Retouching images, Color ranges and replace color options, Cropping images, Understanding Process and spot colors, Choosing pantone colors, Applying fill and stroke colors Mastering Computer Graphics Skill using Corel Draw,

UNIT V:

Introduction to CorelDraw.

Drawing the details of the following in Corel Draw and Applying various texture and effects:

REFERENCES:

1. Adobe Photoshop, 12.0

2. Gruman, Galen, Adobe in Design Cs2 Bible.

3. Adobe Illustrator, 12.0

4. Lazer, Susan.H., Adobe Illustrator For Fashion Design

5. Golding, Mordy, Adobe Creative Suite 2

Related Experience:

Project 1:

Drawing the below given Fashion Deptails by applying various textures and effects.

Fashion Details:

Collars: Turtle, Tuxedo, Cape, Convertible, Shirt, Sailors, Chelsea, Coat, Cowl Neckline.

Sleeves: Raglan, Ruffle, Dolman, Virago, lantern, Leg-O-Mutton, Bell.

Bodice: Basic, Halter Style, Off shoulder, Double Breasted

Skirts: Basic, A-Line, Flared, Fishtail, Petal, Peplum, Puffball, Divided.

Trousers: Basic, Dungarees, Hipster, Capri, Bell Bottom, Jodhpurs, Fisherman Pants, Cargo.

Pockets: Patch, Inseam, Welt, Bound and Pouch.

Accessories: Bags, Belts, Caps, Bows, Jewellery, Scarves.

Project 2:

Figure Drawing: Male, Female and Kids.

Mood Board and story Board based on Theme.

SEMESTER IV

HTC4E03(3)KNIT WEAR TECHNOLOGY

Hours per week: 5 **Credit:4**

Objective:

1. To make the students to understand the basics of Knitting Technology.

Sl No	Course Outcome	Pos/ PSOs	CL	KC	Class Sessions	Lab/ Field study
C01	Understand various knitting procedures	**PSO1**	E	C	15	
C02	Understand the working of knit machines	**PSO1**	U	P	15	
C03	Identify the different types of knit structures	**PSO1**	An	C	15	
C04	Understand the finishing of knit fabrics	**PSO1**	U	P	15	
C05	Identify the applications of knitted fabrics	**PSO1**	An	M	15	
CO6	Understand the properties of knitted fabrics	**PSO1**	U	C	15	
Total hours of Instruction					90	

UNIT I

Weft Knitting Machines and Industry – Knitting Terms and Functional Elements – Selection Criteria in Weft Knitting – Principal Stitches in Weft Knitting – Basic Structures and Notations in Weft Knitting – Basic Machines and Fabrics

UNIT II

Double Knit Structures – Patterning in Weft Knitting – Needle Selection Techniques in

Circular Knitting Machines – Weft Knit Fabric Geometry

UNIT III

Knitting Dynamics – Quality Control in Circular Weft Knitting – Circular Knitting

Developments – Calculations in Weft Knitting

UNIT IV

Finishing of Knitted Fabrics – Wrap Knitting – Functional Elements of Wrap Knitting –

Patterning in Wrap Knitting – Tricot and Raschel Machines – Principal Stitches of Wrap Knitting

UNIT V

Structures of Wrap Knitting – Yarn Preparation, Yarn Feed and Fabric Take-up – Wrap Knit

UNIT VI

Specialty Wrap Knits – Warp Knitted Technical Textiles – Flat Bed Knitting – Hosiery Socks Knitting

REFERENCES:

1. N. Anbumani, “Knitting Fundamentals, Machines, Structures and Developments”, 1st Edition, New Age International Publishers, 2007.

SEMESTER IV

HTC4P01 PROJECT

Hours per week: 10 **Credit: 4**

1. Development of research Programme
2. Collection of Review
3. Conduct Pilot Study in the field
4. Conduct of work in the lab/ Indusrty/ community
5. Analysis of Data
6. Writing for the thesis and submission

SEMESTER IV

HTC4V01 VIVA VOCE

Credit:4

Based on:

1. Dissertation work
2. Internship
3. Course programme

MODEL QUESTION PAPER

FIRST SEMESTER M.Sc. DEGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC1 C01- HISTORIC COSTUMES

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

PART A

Answer any four questions, each in one paragraph. Each question carries a weightage of 2

1. What is cotteshardie?
2. What is Dorian Chiton?
3. What are the three symbols used in Egyptian costume?
4. What all are the ornaments worn by both men and women in Egypt?
5. State the ornaments worn by Asiatic people?
6. What is pantaloon?
7. What is tunic?

(4x2=8 weightage)

PART B

Answer any four Questions, each within one page. Each question carries a weightage of 3

1. Explain in short the costume and accessories worn by the men and women of Egypt.
2. Describe the garment structure in England.
3. Write a description on past to present men and women garment features and accessories.
4. Write a short note on evolution of costumes.
5. Explain the importance and needs of clothing.
6. Describe about Greek costumes.
7. Write a short note on garment features and uses of colors in Rome.

(3x4=12 weightage)

Part C

Answer any two questions. Each question carries a weightage of 5

1. Explain in detail about Egyptian costume.
2. Describe in detail about Italian costume and foot wear.
3. Explain in detail about needs and importance of clothing and evolution of costumes.
4. Explain the garment features of men and women including head accessory and foot wear of German.

(2x5=10 weightage)

FIRST SEMESTER M.Sc DEGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC1 C02- FASHION MARKETING

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

PART A

Answer any four questions, each in one paragraph. Each question carries a weightage of 2

1. What is Retailing?
2. List the functions performed by a retailer.
3. What all are the type of retail chanel?
4. What is store chanel retailing?
5. Define Marketing.
6. What is Post Purchase Evaluation?
7. What is Retail Pricing?

(4x2=8 weightage)

PART B

Answer any four Questions, each within one page. Each question carries a weightage of 3

1. Briefly describe about the functions performed by retailer.
2. Brief the type of retail chanel
3. Explain the buying process.
4. Explain the retail location.
5. What is Demand based pricing?
6. Describe about good costumers to best customers.
7. Explain in short about New Product Pricing.

(3x4=12 weightage)

Part C

Answer any two questions. Each question carries a weightage of 5

1. Explain the types of pricing Strategies.
2. Explain in detail about pricing techniques used for increasing the sale.
3. Define Markdowns. Explain the reason for markdowns.
4. Explain the consideration in setting retail prices

(2x5=10 weightage)

FIRST SEMESTER M.Sc. DEGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC1 C03-COSTUME DESIGN AND ILLUSTRATION

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

PART A

Answer any four questions, each in one paragraph. Each question carries a weightage of 2

1. Define the term Style
2. What are the factors affecting fashion?
3. List the adoption theories of fashion
4. List four Indian and International Designer.
5. Define the term Change
6. What is introduction to a style?
7. Give a note on Pear Body type

(4x2=8 weightage)

PART B

Answer any four Questions, each within one page. Each question carries a weightage of 3

1. Explain the different stages of fashion cycle.
2. Briefly explain any two factors affecting fashion.
3. Briefly write about any Indian Fashion Designer.
4. Write briefly about any two mens ensembles.
5. Explain in detail about the dressing tips for the following:

   a. Hourglass type body shape
   b. Inverted triangle type body shape

6. Explain any two Economic factors that affect fashion.

7. Explain the features of fashion.

(3x4=12 weightage)

Part C

Answer any two questions. Each question carries a weightage of 5

1. Write an essay on the factors affecting fashion.
2. Explain the adoption theories of fashion.
3. Describe the following
   a. fashion guide lines for short and heavy men b. fashion guide line for tall and thin men
4. Explain the following:
   a. Christian Dior b. Coco Chanel
   (2x5=10 weightage)

FIRST SEMESTER M.Sc. DEGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC1 C04- INTRODUCTION TO FASHION DESIGN CONCEPT

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

PART A

Answer any four questions, each in one paragraph. Each question carries a weightage of 2

Describe about the following:

1. Texture
2. Fashion
3. Hue
4. Apparel
5. Bandanna Print
6. Value
7. Moderate silhouette and extreme silhouette

(4x2=8 weightage)

PART B

Answer any four Questions, each within one page. Each question carries a weightage of 3

8. What are the four seasons of fashion?
9. Describe about the role of Fashion Designer in the Fashion Industry.
10. Explain elements used in creating a design.
11. What is long term fashion for casting?
12. Write a short note on any one Indian Fashion Designer
13. What is costing?

14. Write a description about International Fashion Centers.

(3x4=12 weightage)

Part C

Answer any two questions. Each question carries a weightage of 5

19. Describe fashion cycle with a neat diagram.
20. What are the Principles of design?
21. What is Fashion Forcasting?
22. Explain in detail about sampling process in fashion industry.

(2x5=10 weightage)

FIRST SEMESTER M.Sc DEGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC1 C05-RESEARCH METHODS AND STATISTITCS

MODEL QUESTION PAPER

Time: Three Hours Maximum: 30 Weightage

PART A

Answer any four questions, each in one paragraph. Each question carries a weightage of 2

Describe about the following:

1. Research
2. Criteria for a good average.
3. Secondary data
4. Objectives of research.
5. Pilot study.
6. Types of evaluation.
7. Bibliography.

(4x2=8 weightage)

PART B

Answer any four Questions, each within one page. Each question carries a weightage of 3

8. Find the mean and standard deviation for the following data.
   Marks 0-20 , 20-40, 40-60, 60-80, 80-100
   No of students: 5, 17, 30, 12, 6
9. What are the components of a research report?

10. Explain types of variables.
11. What are the characteristics of a good questionnaire?
12. Characteristics of good research problem.
13. How can you select a systematic sample?
14. Explain scatter diagram method. (3x4=12 weightage)

Part C

Answer any two questions. Each question carries a weightage of 5

19 Define research. Explain the types of research.

20 Explain sampling and merits and limitation of sampling.

21 Calculate co-efficient of correlation between purchase and sles from the figures given below Purchase (in 000 Rs) 2345678
Sale (in 000 Rs) 45612954

22 Explain the principles and basic components of research report writing.

(2x5=10 weightage)

SECOND SEMESTER M.Sc DEGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC2 C06 QUALITY ASSURANCE AND TEXTILE TESTING

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

PART A

Answer any four questions, each in one paragraph. Each question carries a weightage of 2

1. Define linear density.
2. What is meant by yarn crimp?
3. What is CSP?
4. Explain breaking strength and tensile strength.
5. List the types of abrassion.
6. Differentiate between waterproof and showerproof.
7. What are the causes of pilling?

(4x2=8 weightage)

PART B

Answer any four Questions, each within one page. Each question carries a weightage of 3

1. Discuss the objectives and the importance of maintaining standards in textile testing.
2. Explain any three internal bodies maintaining quality standards of textile products.
3. How is fibre strength measured?
4. Write a note on fabric wicking.
5. Explain the methods of measuring fabric drape.

6. Discuss the tongue tear test.
7. Describe the fabric characteristics affecting tensile strength.

(3x4=12 weightage)

Part C

Answer any two questions. Each question carries a weightage of 5

8. Enumerate the methods of determining breaking strength of fabrics .
9. Explain the working of Shirley air permeability tester.
10. Describe the methods of determining fabric stiffness.
11. Explain the methods of measuring crease recovery.

(2x5=10 weightage)

SECOND SEMESTER M.S.c DEGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC2L01- FASHION DRAPING

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

1. Drape the dress form according to the pattern given.

SECOND SEMESTER M.Sc. DEGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC2 C07- VISUAL RETAILING AND ENTREPRENEUSHIP MANAGEMENT

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

PART A

Answer any four questions, each in one paragraph. Each question carries a weightage of 2

1. Define Visual Merchandising.
2. What is a line?
3. What type of response do curved lines tend to evoke?
4. Define proportion.
5. Name the items used in store exterior.
6. How is Awnings important for the exterior of the store?
7. Define Angled front.

(4x2=8 weightage)

PART B

Answer any four Questions, each within one page. Each question carries a weightage of 3

1. Describe in short the type of manneqins.
2. Describe the uses of each of the following floor fixtures:

a. round rack
b. T-stand
c. c quad rack

d. d. gondola
3. List and explain the criteria a visual merchandiser should use for selecting fixtures.
4. Describe in short about the store exterior.
5. Explain the difference between Awnings and Marquees.
6. What is a Marquee? How can it be used in visual merchandising?
7. Name the types of display settings and explain each.

(3x4=12 weightage)

Part C

Answer any two questions. Each question carries a weightage of 5

1. Explain in detail about the store interior.
2. What type of light sources would you select for a shop? Why?
3. Explain the store front design.
4. Explain in detail the agencies for development of entrepreneurship.

(2x5=10 weightage)

SECOND SEMESTER M.Sc DEGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC2L02: ADVANCED PATTERN MAKING AND CONSTRUCTION TECHNIQUES

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

1. Draft and adapt the given pattern
2. Construct and finish the garment

SECOND SEMESTER M.S.c DEGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC2C08- TECHNICAL TEXTILES

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

PART A

Answer any four questions, each in one paragraph. Each question carries a weightage of 2

1. What is technical textiles?
2. What is Globalization?
3. Describe melt blown.
4. Write a short note on Web lay flash spinning
5. What are the specialties of technical Textiles?
6. Write a short note on Nano fibres
7. What is conventional and new developed fibre?

(4x2=8 weightage)

PART B

Answer any four Questions, each within one page. Each question carries a weightage of 3

8. Describe about technical fibres and yarns
9. What are the process of hydroentanglement
10. Describe about Geo textiles
11. Describe about and process of technical textile
12. What is heat setting and chemical process.
13. Explain transport textile

14. Write short note about transport textiles

(3x4=12 weightage)

Part C

Answer any two questions. Each question carries a weightage of 5

15. What are the applications of technical textiles
16. Describe automotive textiles
17. Explain finishing of technical textiles
18. Explain Smart textiles.

(2x5=10 weightage)

THIRD SEMESTER M.Sc. DEGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC3 C09 FABRIC CONSRUCTION AND ANALYSIS

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

PART A

Answer any four questions, each in one paragraph. Each question carries a weightage of 2

1. List the types of handlooms.
2. What is a lifting plan?
3. What is the principle of the rapier loom.
4. Explain the basic operations of a loom.
5. List the derivatives of a plain weave.
6. Differentiate between satin and sateen weaves.
7. Draw the design, lifting plan of broken twill.

(4x2=8 weightage)

PART B

Answer any four Questions, each within one page. Each question carries a weightage of 3

6. Explain the ornamentation of plain weave.
7. Explain the mechanism of weaving jacquard and dobby.
8. Briefly explain Pile weaves-Warp pile and Weft pile .
9. Write a note on pile weaves.
10. Explain welts and pique fabrics.
11. Discuss the derivatives of plain weave.

12. Describe any three complex weaves.

(3x4=12 weightage)

Part C

Answer any two questions. Each question carries a weightage of 5

1. Enumerate the working of the various shuttleless looms.
2. Explain twill weave and its derivatives .
3. Describe satin and sateen weaves with designs.
4. Explain the various towelling weaves.

(2x5=10 weightage)

THIRD SEMESTER M.Sc. DGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC3 C10- TEXTILE CHEMISTRY

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

PART A

Answer any four questions, each in one paragraph. Each question carries a weightage of 2

1. What is Polymers?
2. Properties of wetting agent.
3. What is Desizing?
4. What is Due processing?
5. What is color mixing system?
6. What is Hue?
7. What is the importance of Textile Chemistry?

(4x2=8 weightage)

PART B

Answer any four Questions, each within one page. Each question carries a weightage of 3

1. What is the definition of polymer?
2. What are the needs and importance of Textile Chemistry?
3. Explain the principles of printing.
4. Explain the structure and use in classification of dyes.
5. What is chemical composition and properties of wetting agent?
6. Describe Eco- friendly chemicals.
7. Explain fixation of print and various methods used.

(3x4=12 weightage)

Part C

Answer any two questions. Each question carries a weightage of 5

1. Explain preparatory process.
2. What are the principles of dyeing and mechanism of dyes?
3. Describe the importance of Eco- friendly textiles.
4. What is the preparatory process in applying the fabric.

(2x5=10 weightage)

THIRD SEMESTER M.Sc. DEGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC3 E01 (1)- FASHION CHOREOGRAPHY

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

PART A

Answer any four questions, each in one paragraph. Each question carries a weightage of 2

1. What is finale
2. What is fashion show
3. What is model.
4. Give a note on origin of fashion show
5. Describe advertizing
6. What are the types of fashion show
7. What is mapping

(4x2=8 weightage)

PART B

Answer any four Questions, each within one page. Each question carries a weightage of 3

8. Describe the importance of fashion show
9. What are the difference steps in planning a fashion show
10. What is opening the show
11. Describe the importance of fashion choreography
12. Write a description about international fashion centre.
13. Write short note on advertizing
14. Describe about dancing

(3x4=12 weightage)

Part C

Answer any two questions. Each question carries a weightage of 5

15. Describe about the history of fashion show
16. What are the difference steps in planning a fashion show?
17. Describe about technical framework of fashion show
18. What are promotional activities using fashion show?

(2x5=10 weightage)

THIRD SEMESTER M.Sc DEGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC3 E01 (2)- FASHION COMMUNICATION

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

PART A

Answer any four questions, each in one paragraph. Each question carries a weightage of 2

1. What is fashion?
2. What are the different media used in fashion communication?
3. What is Media ethics?
4. What are the difference between fashion photographs and fashion shows?
5. What is scripting shows?
6. What are the features of reporting?
7. What are the qualities of audio visuals?

(4x2=8 weightage)

PART B

Answer any four Questions, each within one page. Each question carries a weightage of 3

8. Describe Visual Merchandising.
9. Describe the role of visual merchandiser in fashion industry.
10. Write a short note on editing and printing techniques.
11. Explain fashion communication.

12. Describe on fashion shows and multimedia.
13. Explain on interviews conducted.
14. Describe on fashion photographs.

(3x4=12 weightage)

Part C

Answer any two questions. Each question carries a weightage of 5

15. Explain in detail on fashion choreography and fashion events.
16. Explain about visualization of décor and ambience.
17. Explain in detail on short films and audio visuals
18. Describe on theories of fashion adaption and need for promotion.

(2x5=10 weightage)

THIRD SEMESTER M.Sc DEGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC3 E01 (3)- SOCIOLOGY OF CLOTHING

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

PART A

Answer any four questions, each in one paragraph. Each question carries a weightage of 2

1. What is Modesty?
2. What is color mixing?
3. Define individual values.
4. How can you make the first impression the best impression?
5. What are the basic functions of clothing?
6. What is adornment?
7. Define apparel.

(4x2=8 weightage)

PART B

Answer any four Questions, each within one page. Each question carries a weightage of 3

8. Explain the theories of fashion.
9. Explain the relation of individual values, intrest and attitudes of clothing.
10. Explain the role of society in clothing.
11. Write a note on clothes and occupation.
12. Explain clothing and social behavior.
13. How can you motivate a person in choosing a cloth.

14. What is cloths and conformity?

(3x4=12 weightage)

Part C

Answer any two questions. Each question carries a weightage of 5

15. Explain the relation between clothing and wearer.
16. Impact of color on cloths.
17. Clothing in religion and culture. Explain

(2x5=10 weightage)

THIRD SEMESTER M.Sc DEGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC3E02 (1)- TEXTILES AND ENVIRONMENT

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

PART A

Answer any four questions, each in one paragraph. Each question carries a weightage of 2

1. What is eco- labeling?
2. What is corn fiber?
3. Define green shopping.
4. List any 2 eco- friendly fibers.
5. What are the basic types of eco- label?
6. What is spider silk?
7. What is cellulosic fibers?

(4x2=8 weightage)

PART B

Answer any four Questions, each within one page. Each question carries a weightage of 3

8. Explain eco- friendly practices for fabric care.
9. Explain any two eco- friendly fibers.
10. Write a note on green shopping.
11. Explain the role of uses of enzymes in bio technology.
12. Explain the organic and conventional cotton.
13. Explain types of eco- labeling.

14. Write a note on banana fibers.

(3x4=12 weightage)

Part C

Answer any two questions. Each question carries a weightage of 5

15. Explain the need of eco- friendly fabrics in Indian Textile Industry.
16. Explain German Ban.
17. Explain environmental impacts of eco- friendly fibers.
18. Use of bio technology in textile industry.

(2x5=10 weightage)

THIRD SEMESTER M.Sc DEGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC3E02 (2)- SCIENCE OF CLOTHING COMFORT

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

PART A

Answer any four questions, each in one paragraph. Each question carries a weightage of 2

1. What are the basic elements of clothing comfort?
2. Explain the physiological factors of clothing comfort?
3. Write the laws of Psychophysics?
4. What you mean by Wear Trial Techniques?
5. What are the psychological aspects of aesthetic comfort?
6. Discuss the Psycho physiological factors of clothing?
7. Write a note on Liquid water transfer?

(4x2=8 weightage)

Part B

Answer any four Questions, each within one page. Each question carries a weightage of 3

1. Describe the Sensory perceptions of Human body?
2. What are the physiological requirements of the human body?
3. Explain Sensory system of human skin Nerve endings in human skin?
4. What you mean by Tactile comfort sensations?
5. Which are the fabric parameters affecting tactile sensations?
6. Explain the parameters for expressing thermal characteristics?
7. Explain the Nerve endings in human skin?

(3x4=12 weightage)

Part C

Answer any two questions. Each question carries a weightage of 5

1. Write a detailed note on Thermal transmission and Moisture transmission?
2. Relate the terms Garment fit and comfort relationship?
3. Write in detail about Dynamic heat and Mass Transmission?
4. Explain Neurophysiological process in clothing?

(2x5=10 weightage)

THIRD SEMESTER M. Sc DEGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC3E02 (3)– TESTING OF FUNCTIONAL AND TECHNICAL TEXTILES

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

PART A

Answer any four questions, each in one paragraph. Each question carries a weightage of 2

1. What are the objectives of testing?
2. What you mean by KESF and FAST methods?
3. What is the purpose of Protective clothing?
4. Write the purpose of Geo textiles?
5. Comment on Technical textiles?
6. Write a note on Textile reinforcement?
7. What is the purpose of UV protective clothing?

(4x2=8 weightage)

Part B

Answer any four Questions, each within one page. Each question carries a weightage of 3

1. Write a note on Nozzle extraction principle?
2. Write a note on Testing of Fabric handle characteristics?
3. Explain the testing process of textiles used for extreme heat condition?
4. Explain the testing of Transmission characteristics?
5. Write a detailed note on Testing of extreme fire and cold protective clothing?
6. Discuss on testing of Geo textiles?
7. Explain the testing of Moisture characteristics?

(3x4=12 weightage)

Part C

Answer any two questions. Each question carries a weightage of 5

1. Explain the testing of filter fabrics & fibre reinforced composites?
2. Write on Testing of UV protective textiles and testing of ballistics protective textiles?
3. What is an electromagnetic shielding textile? Explain the test methods?
4. Write on testing of Compression bandages and special testing for Non woven and Technical textiles?

(2x5=10 weightage)

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC4 L03 QUALITY ASSURANCE AND TEXTILE TESTING

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

1. Define the following- bursting strength, breaking load and flexural rigidity.
2. Carry out the given experiment and write down the aim, apparatus, principle and observations along with the calculations if any.

FOURTH SEMESTER M.Sc DEGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC4 L04 TEXTILE CHEMISTRY

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

1. Identify the fibres in warp and weft in the given blend sample
2. Identify the dye in the sample given
3. Dye the given sample of cotton fabric with direct dye.

FOURTH SEMISTER M.S.c DGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC4 E03 (1) - HOME TEXTILES

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

PART A

Answer any four questions, each in one paragraph. Each question carries a weightage of 2

1. Define the term Home Textiles.
2. What are the factors influencing selection of Home Textiles?
3. Name the materials used for curtains and draperies.
4. Define rails.
5. List the types of Kitchen Lines.
6. Define dining.
7. What is wall hanging?

(4x2=8 weightage)

PART B

Answer any four Questions, each within one page. Each question carries a weightage of 3

8. Describe Home Textiles.
9. What is floor covering and explain in short about the types.
10. Brief out the uses and care of wall hangings.
11. Describe the parts of door and windows.
12. Describe the factors affecting the selection of table and bathroom lines.
13. Explain the types of bathroom lines.
14. Describe on the materials used for curtains and draperies.

(3x4=12 weightage)

Part C

Answer any two questions. Each question carries a weightage of 5

15. Define Home Textiles and explain the factors influencing selection of Home Textiles.
16. Explain in detail on the uses and care advantages and disadvantages.
17. Explain the factors affecting the selection of table and bathroom lines.
18. Explain soft furnishing for kitchen.

(2x5=10 weightage)

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC4 E03 (2)- COMPUTER APPLICATION IN FASHION DESIGNING

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

PART A

Answer any four questions, each in one paragraph. Each question carries a weightage of 2

Describe the following:

1. Tool box
2. Lay planning
3. Fashion studio
4. Paths
5. Grids and Grid line
6. Corel draw
7. Color paletts

(4x2=8 weightage)

PART B

Answer any four Questions, each within one page. Each question carries a weightage of 3

8. Write a short note on Fashion studio
9. Describe on marker efficiency on garment designing.
10. Describe pattern grading for children.
11. What is vector graphic and bitmap graphic?
12. Illustrate a garment and give a description on that.
13. Explain Importing and exporting.
14. Write a short note on printing documents.

(3x4=12 weightage)

Part C

Answer any two questions. Each question carries a weightage of 5

15. Introduction to color modes. Explain.
16. Explain tools and techniques of computer aided garment designing.
17. Illustrate a formal wear and give a description on that.
18. Explain drawing details followed in corel draw.

(2x5=10 weightage)

FOURTH SEMESTER M.Sc DEGREE EXAMINATION

Home Science (Textiles and Costume Science)

HTC4 E03 (3)- KNIT WEAR TECHNOLOGY

MODEL QUESTION PAPER

Time: Three Hours Max Weightage: 30

PART A

Answer any four questions, each in one paragraph. Each question carries a weightage of 2

1. Define Knitting.
2. List the principal stitches in weft knitting
3. Name the basic machines used in knitting.
4. What all are the finishing of knitted fabrics.
5. What is the structure of warp knitting?
6. Define flat bed knitting.
7. Define warp and weft knitting

(4x2=8 weightage)

PART B

Answer any four Questions, each within one page. Each question carries a weightage of 3

8. Briefly explain on knitting
9. Briefly explain on circular knitting machine.
10. Describe warp and weft knitting
11. Briefly explain on the finishes of knitted fabric.
12. Tricot and Rachel machines. Briefly explain.
13. Briefly explain the principals of stitches of warp knitting.
14. Briefly explain on flat bed kitting and Hosiery Socks knitting.

(3x4=12 weightage)

Part C

Answer any two questions. Each question carries a weightage of 5

15. Explain weft knitting under the following:
    a) selection criteria in weft knitting b) Principal stitches in weft knitting
    c) basic structures.
16. Explain Weft Knitting Fabric Geometry

17. Explain the finishing of knitted fabric.

18. Explain the structure of warp knitting

(2x5=10 weightage)