M.Sc.,

TEXTILES AND FASHION DESIGNING

SYLLABUS

AFFILIATED COLLEGES

2026 – 2027 ONWARDS

MANONMANIAM SUNDARANAR UNIVERSITY, TIRUNELVELI

OUTCOME BASED EDUCATION - CHOICE BASED CREDIT SYSTEM

OPERATIONAL GUIDELINES FOR FRAMING CURRICULUM

VISION AND MISSION OF THE UNIVERSITY

Vision

"To provide quality education to reach the un-reached"

Mission

- To conduct research, teaching and outreach programmes to improve conditions of human living
- To offer a wide variety of off-campus educational and training programs, including the use of information technology, to individuals and groups.
- To develop partnership with industries and government so as to improve the quality of the workplace and to serve as catalyst for economic and cultural development
- To provide quality / inclusive education, especially for the rural and un-reached segments of economically downtrodden students including women, socially oppressed and differently abled

PREAMBLE

- Outcome Based Education (OBE) has emerged as an effective approach in higher education to ensure quality, skill oriented and learner centered education. The Choice Based Credit System (CBCS) provides flexibility in curriculum design enables students to acquire knowledge, skills and competencies according to their interests and career aspirations. The curriculum is designed to promote flexibility, critical thinking, problem solving ability and lifelong learning through effective teaching, learning, and assessment practices. The revised curriculum framework integrates Programme Educational Outcomes (PEOs), Programme Outcomes (POs), Programme Specific Outcomes (PSOs), and Course Outcomes (COs) in alignment with the Vision and Mission of the University. The adoption of Revised Bloom's Taxonomy (RBT) ensures effective attainment of knowledge, skills, ethical values, and employability among learners. The courses are systematically designed and mapped to ensure that the outcomes of all courses collectively con-

tribute to the achievement of the programme outcomes and the holistic development of students.

PROGRAMME EDUCATIONAL OUTCOMES (PEO)

In alignment with the Vision and Mission of the University, the following have been defined as the PEO for the graduates.

PEO1: Developing strong positive attitude to learn independently the concepts in the field of study

PEO2: Ensuring confidence among the learners to apply the knowledge and skills gained to solve real life issues

PEO3: Habituating ethical values among the learners to succeed in personal and professional life

PROGRAMME OUTCOMES (PO)

Programme Outcomes for the Under Graduate and Post Graduate Degree Programmes of the University are articulated as under.

After the successful completion of Undergraduate Programme from the University, the learner should be able to

PO1: Comprehend the knowledge acquired and communicate the same to others.

PO2: Analyse and compare the factual data / situation to comprehend and to critically evaluate to find solution to the problem ahead.

PO3: Apply theories and philosophies learned in solving the problem in scientific manner.

PO4: Think reflectively on the earlier activities and attempt for self directed lifelong learning process.

PO5: Understand multicultural existence and identify the means to prolong moral/ethical values in personal and professional life.

PO6: Explore through multiple sources and get exposed to the digital literacy and information explosion with latest technology.

PO7: Act as a responsible member in the varied teams with facilitating capability and formulate teams as a leader for defined purposes.

Program Specific Outcomes (PSOs)

On successful completion of Bachelor of B programme, the student should be able to:

PSO1: Disciplinary Knowledge:

Understand the fundamental principles, concepts, and theories related to B. Also, exhibit proficiency in performing experiments in the laboratory.

PSO2: Critical Thinking:

Analyse complex problems, evaluate information, synthesize information, apply theoretical concepts to practical situations, identify assumptions and biases, make informed decisions and communicate effectively.

PSO3: Problem Solving:

Employ theoretical concepts and critical reasoning ability with B and practical skills to solve problems, acquire data, analyze their physical significance and explore new scientific findings.

PSO4: Analytical & Scientific Reasoning:

Apply scientific methods, collect and analyse data, test hypotheses, evaluate evidence, apply statistical techniques and use computational models.

PSO5: Research related skills:

Formulate research questions, conduct literature reviews, design and execute research studies, communicate research findings and collaborate in research projects.

PSO6: Self-directed & Lifelong Learning:

Continuously update the knowledge by lifelong learning and contribute to the growth and development of science and technology.

PSO7: Employability and Entrepreneurship

Develop skills for employability, entrepreneurship, and career readiness in industry, education, and technology-driven sectors.

Each Course has to address a minimum of 4 PSOs

Level of contribution of the Course towards attaining PSOs

0 – No Contribution 1 – Low Level 2 – Medium Level 3 – High Level

COURSE OUTCOMES (CO)

Four Course Outcomes (COs) for each course that can be achieved by the learners on completion of that particular course are as follows:

Considering outcomes related to

i. K1 and K2 level of evaluation in all the Units as CO1

ii. K3 level of evaluation in all the Units as CO2

iii. K4 level of evaluation in all the Units as CO3

iv. K5 and K6 level of evaluation in all the Units as CO4.

All the COs proposed in each of the courses should be mapped with POs based on the relevance.

Level of Correlation between COs and POs

0 – No Correlation 1 – Low 2 – Medium 3 – High

G. Mapping of Course Outcomes (COs) with Programme Outcomes (POs) and Programme Specific Outcomes (PSOs) can be carried out accordingly, assigning the appropriate level in the grids:

	POs							PSOs						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7
CO1														
CO2														
CO3														
CO4														

MEASUREMENT OF ATTAINMENT OF COURSE OUTCOME

The Course Outcomes (COs) are measured through the performance of learners by direct

and indirect assessment methods for that particular course.

i. Internal Assessment (25 Marks)

Tests – 20 Marks

Seminar / Assignments/Attention (Participation) in Class – 5 Marks

ii. Semester End Examinations (75 Marks)

Written exams, Practical, Project report, and Comprehensive Viva Voce

Note: In both Internal and Semester End Examinations

Lower Order Thinking (K1, K2, & K3) – 40 % in each part

Higher Order Thinking (K4, K5, & K6) – 60% in each part

EVALUATION SCHEME

* M.Sc curriculum is divided and studied in four semesters.

* The internal assessments and external examination are the two parts of evaluation scheme.

* The external theory and practical examinations will be conducted by the university at the

end of each semester.

* There is a separate passing minimum of 50% for the external and overall components.

DISTRIBUTION OF MARKS BETWEEN INTERNAL AND EXTERNAL ASSESSMENT

FOR CORE, SKILL ENHANCEMENT,

ELECTIVE, AND ALLIED COURSES.

* Theory Marks 25: 75

* Practical Marks 50: 50

Pass minimum of 50% for external and overall components.

1. Internal Assessment.

Internal Marks for Theory shall be allotted in the following manner

The average of the best two tests from three compulsory tests. Each test is of one hour duration	20 marks
Assignment	05 marks
Total	25 marks

2. Marks for Practical / Major Project shall be allotted in the following manner

Internal Marks: 50; External Marks: 50

External evaluation of Project;

Project report evaluation and Viva-Voce will be conducted by both the External examiner and the

Guide at the end of the semester.

1. ELIGIBILITY FOR ADMISSION

B.Sc - Costume Design and Fashion, B.Sc.-Textile and Fashion Designing, B.Sc-Fashion Technology and B.Sc degree related to textile or fashion.

2. DURATION OF THE COURSE

The course for the Degree of Master of Textiles And Fashion Design shall consist of two academic years divided in to four semesters. Each semester consists of 90 working days.

3. COURSE OF STUDY

The course of study shall comprise instruction in the following

Semester–I	Credit	Semester-II	Credit	Semester-III	Credit	Semester–IV	Credit

subjects according to the syllabus and books prescribed from time to time.

4. EXAMINATIONS

The theory examinations will be conducted for 3 Hours by the University in the subjects prescribed for all the semesters in the month of November & April every year. The practical examinations will be conducted for 3 & 4 Hours by the University in all the subjects prescribed in the month of November &April.

At the end of the fourth semester project viva-voce will be conducted on the basis of the Dissertation/Project Report submitted by the student. The Viva-voce will be conducted by one Internal and One External Examiner.

5. SCHEME OF THE EXAMINATION

The scheme of examinations for the course is given in Annexure. All the practical examinations/ project work shall be conducted & evaluated internally by the institution themselves with internal and external examiners appointed by the University.

Section	Type of questions	Mark Distribution
Part A	Fifteen Multiple choice question (Three question from each unit compulsory)	15x1=15Marks
Part B	Five Internal Choice questions (One question from each unit: either or choice)	5x4=20marks
Part C	Five Internal Choice questions (One question from each unit: either or choice)	5x8=40 marks
	Total	**75 Marks**

1.1. Core-I	5	2.1. Core-IV	5	3.1. Core-VII	5	4.1. Core-XI	5
1.2 Core-II	5	2.2 Core-V	5	3.2 Core-VII	5	4.2 Core-XII	5
1.3 Core – III	4	2.3 Core – VI	4	3.3 Core – IX	5	4.3 Project with viva voce	7
1.4 Discipline Centric Elective -I	3	2.4 Discipline Centric Elective – III	3	3.4 Core – X	4	4.4Elective - VI (Industry / Entrepreneurship) 20% Theory 80% Practical	3
1.5 Generic Elective-II:	3	2.5 Generic Elective -IV:	3	3.5 Discipline Centric Elective - V	3	4.5 Skill Enhancement course / Professional Competency Skill	2
		2.6 NME I	2	3.6 NME II	2	4.6 Extension Activity	1
				3.7 Internship/ Industrial Activity	2		
	20		**22**		**26**		**23**

Time : Three Hours **Maximum : 75 Marks**

	Part-A(10x1=10 marks) **Answer all questions**	
1.	The process of selling goods directly to the ultimate consumer is called _____ a) Wholesaling b) Manufacturingc) Retailing d) Importing	K1
2.	Which of the following is NOT a type of retail store? a) Department Storeb) Catalog Showroomc)FactoryOutlet d) Wholesale Club	K2
3.	The fastest growing segment of retail retailing is? a) Non-store retailing b) Warehouse Stores c) Hypermarkets d) Category killers	K2
4.	Consumer behaviour primarily involves _____ a) How goods are manufactured b) Store layout c) The decision processes of buyers d) Sales promotions.	K1
5.	Which is NOT a consumer assessment tool? a) Psychographics b) Lifestyle analysis c) Price negotiation d) Market segmentation.	K2
6.	The most important Cultural force in buyer behaviour is? a) Technology b) Tradition c) Economic Power d) Brand presence	K1
7.	Who manages the day-to-day daily operations and staff in a store? a) salesperson b) store manger c) marketing manager d) supplier	K3
8.	The back of house generally refers to _____ a) selling areas b) Stockroom and Storage c) Visual merchandising	K2

	d) marketing office.	
9.	Inventory control is part of _____ a) Front of house b) marketing c) customer service d) Back of house	K3
10.	SKU Stands for _____ a) Stock keeping unit b) Store quality unit c) Sales keeping unit d) Standard Quanting unit	K4
11.	What is the first step in merchandise management planning? a) Execution of the plan b) Develop a business plan c) Develop a forecast for sales d) Determine Inventory levels	K3
12.	Retailers plan inventory to improve _____ a) Store layout b) Customer traffic c) Brand Image d) Stock turnover	K3
13.	Omni-channel retailing means _____ a) Using one sales channel b) Cross cultural promotion c) Integrating multiple Channels for Seamless experience d) Telemarketing only	K2
14.	Social commerce involves _____ a) Promotion at trade fairs b) Creating brochures c) Selling using social networks d) Old format retailing	K2
15.	RFID technology in retailing helps with _____ a) Automating inventory management b) Store Layout design c) Improving employee productivity d) Designing advertisements	K3
	PART – B (5 X 5 = 25 Marks) **Answer ALL questions, choosing either (a) or (b). Each answer should not exceed 600 words**	
16.	a) Describe the role of fashion supply chains in the retail industry. (OR) b) List and briefly explain three types of retailers.	K6
17.	a) What are the components of consumer analysis? (OR)	K5

	b)What is psychographic segmentation.	
18.	a) Explain the managerial roles within store management. (OR) b) What are the main components of "Employeemanagement".	K5
19.	a) Briefly explain the concept of "front of house". (OR) b) How does the role of a store merchandiser differ from a visual merchandiser?	K4
20.	a) Explain the advantages of "Retailer". (OR) b) Describe the role of technology in retail sector.	K4
	PART C - (5 X 8=40 marks) **Answer ALL questions by choosing (a) or (b)** **Each answer should not exceed 600 words.**	
21.	a) Compare and contrast department stores and specialty shops as a classification of retailers. (OR) b) Explain the concept of franchising and its advantages.	K6
22.	a) Explain the concept of "Family Life cycle" and its impact (OR) b) Elaborate on the factors involved in consumer analysis. How do these factors influence retail strategies?	K5
23.	a) Discuss in detail the various managerial roles in store management. (OR) b) Explain the importance of "Store logistics" in retail operations.	K2
24.	a) Detail the importance of consumer circulation, accessibility. (OR) b) Describe the role of a store merchandiser. How do they contribute to the overall success of the store?	K3
25.	a) Discuss a successful "retailer and designer collaboration. (OR) b) Explain the process of an e-commerce transaction, from the customer's initial search to post-purchase support.	K5

Choice Based Credit System (CBCS), Learning Outcomes Based Curriculum Framework (LOCF) Guideline Based Credits and Hours Distribution System for all

Post – Graduate Courses including Lab Hours

First Year – Semester – I

Part	List of Courses	Credits	No. of Hours
	Core – I	5	7
	Core – II	5	7
	Core – III	4	6
	Elective – I	3	5
	Elective – II	3	5
		20	**30**

Semester-II

Part	List of Courses	Credits	No. of Hours
	Core – IV	5	6
	Core – V	5	6
	Core – VI	4	6
	Elective – III	3	4
	Elective – IV	3	4
	Skill Enhancement Course [SEC] - I	2	4
		22	**30**

Second Year – Semester – III

Part	List of Courses	Credits	No. of Hours
	Core –VII	5	6
	Core –VIII	5	6
	Core –IX	5	6
	Core (Industry Module) – X	4	6
	Elective – V	3	3
	Skill Enhancement Course - II	2	3
	Internship / Industrial Activity [Credits]	2	-
		26	**30**

Semester-IV

Part	List of Courses	Credits	No. of Hours
	Core – XI	5	6
	Core – XII	5	6
	Project with VIVA VOCE	7	10
	Elective – VI (Industry Entrepreneurship)	3	4
	Skill Enhancement Course – III / Professional Competency Skill	2	4
	Extension Activity	1	-
		23	**30**

Total 91 Credits for PG Courses

Credit and Hours Distribution System for all PG courses including Lab Hours

First Year – Semester-I

Part	List of Courses	Credit	No. of Hours
Core-I	Advanced Textile Science	5	7
Core—II	Textiles and Apparel Quality Evaluation	5	7
Core-III	Advance Garment Construction-Practical	4	6
Elective-I Discipline Centric	A)Sustainability in Textile and Fashion	3	5
	B) Design Research		
Elective-II Generic	Fashion Sketching (Or) CAD in Fashion Designing Practical	3	5
		20	**30**

Semester – II

Part	List of Courses	Credits	Hours
Core-IV	Fashion Merchandising	5	6
Core-V	Technical Textiles	5	6
Core-VI	CAD in textile Designing Practical	4	6
Elective-III Discipline Centric	A)Import Export Management & Documentation B)Apparel Machinery Operations and Maintenance	3	4
Elective-IV-Discipline Centric	A)Entrepreneurship Development in Textiles B)Communication for Fashion Business	3	4
Skill Enhancement Course (SEC) -I	Surface Ornamentation Practical	2	4
	Total	**22**	**30**

Semester – III

Part	List of Courses	Credit	No. of Hours
Core-VII	Research Methodology and Statistics in Textiles	5	6
Core-VIII	Textile Testing	5	6
Core-IX	Textile Testing Practical	5	6
Core-X	Advanced Textile Processing	4	6
Elective-V Discipline Centric	Online Business (or) Fashion Retailing	3	3
3.6 Skill Enhancement-II	Fashion portfolio - Practical	2	3
3.7 Internship/Industrial Activity		2	-
		26	**30**

Semester-IV

Part	List of Courses	Credit	No. of Hours
Core-XI	World Costume	5	6
Core-XII	Visual Merchandising	5	6
Core-XIII	Project with Viva Voce	7	10
Elective-VI (Industry/Entrepreneur ship) 20% Theory 80% Practical	Accessory Designing- Practical (or) Fashion Photography -Practical	3	4
Skill Enhancement Course/ Professional Competency Skill	Social media Marketing	2	4
Extension Activity		1	
		23	**30**

Courses PSOs mapping

Course	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
Advanced Textile Science	3	2	1	1	1	2	1
Textiles and Apparel Quality Evaluation	2	3	1	1	1	1	1
Advance Garment Construction (Practical)	1	1	3	2	1	2	1
Sustainability in Textile and Fashion	1	1	1	1	2	3	1
Design Research	1	1	2	1	2	3	2
Fashion Sketching / CAD in Fashion Designing (Practical)	1	1	3	3	1	1	1
Fashion Merchandising	1	1	1	2	3	2	2
Technical Textiles	3	2	1	1	1	3	1
CAD in Textile Designing (Practical)	1	1	3	3	1	2	1
Import Export Management & Documentation	1	1	1	2	3	1	3
Apparel Machinery Operations & Maintenance	2	2	2	1	1	1	2
Entrepreneurship Development in Textiles	1	1	1	1	3	2	3
Communication for Fashion Business	1	1	1	1	2	1	3
Surface Ornamentation (Practical)	1	1	3	3	1	2	1

Each course has to address a minimum of 4 PSO. Level of contribution of the course towards attaining PSOs. 0 – No Contribution 1 – Low Level 2 – Medium Level 3 – High Level

CORE I- ADVANCED TEXTILE SCIENCE

Course Outcomes (COs)

CO1	Explain the classification, properties, recent developments, and end uses of natural and high-performance textile fibres.	K1 and K2
CO2	Describe the manufacturing processes, characteristics, and applications of textured yarns, sewing threads, and fancy yarns.	K3
CO3	Analyze the working principles and operational features of different weaving and knitting machines used in textile production.	K4
CO4	Evaluate the fibre requirements, web formation methods, properties, and applications of nonwoven fabrics in various industries.	K5 and K6

UNIT-I

Natural fibers – introduction - classification of textile fibers- Properties and end uses. Recent development in natural fibres -coffee ground fibres– nettle fibres – lotus fibres – pineapple fibres , Milk fiber, sea weed and shell.

UNIT-II

High performance fibers - Glass fibers, carbon fibers, Armaid Fiber, Ceramic fibers, Chitosan fibers, Alginate fibers , bicomponent fibres, super absorbent fibres, optical fibres, melamine fibres, micro fibres – nano fibres–hollow fibres Properties and end uses .

UNIT-III

Texturization-Objects-Typesoftexturedyarns-Falsetwisttexturedmethod,Stufferbox textured method, Edge Crimping textured Method- Advantages of textured yarn -sewing Threads - Definition, Properties and Types- Manufacturing of sewing threads -Fancy yarns – Definition - classification- Slub yarns – Crimp yarns– Novelty yarns–Boucle yarns.

UNIT-IV

Weaving Process – Types of Loom- Shuttle loom- shuttle less loom - Working principle of Air Jet Loom–Working Principle of Water Jet Loom-Working principle of Projectile Loom -Working principle Rapier loom.

UNIT-V

Knitting – Classification of Knitting machines – Warp Knitting -Types, Weft knitting - Types, properties of knitted fabrics. Nonwoven-Definition and Classification. Fiber properties and Requirements. Web Formation .Dry laid, Parallel laid and cross laid formation-Application and End uses.

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2. HearleJ.W.SHighperformancesfibers,WoodheadpublishingLtdCambridge,England,2
   1.
3. Abinson,M.Principles of weaving.Textile Institute Manchester.
4. Corbman,B.P.Textiles Fiber to FabricMcGrawhillPublishing,6th,Edition1983.

5. Handbookoftextilefibrestructuresixeditionvolume-2woodheadpublishing In textiles.
6. Velensky, L .D, G., E.P.G Textile Science CBS Publishers and Distribution , 2003.7.Sustainablefibresforfashionindustryvolume2,SubramanianSenthilKannan Muthu, Miguelangel Gardetti editors. Springer.

CO- PO & PSO Mapping Matrix

COs /	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	3	2	1	2	3	2	1	3	1	2	2	3	1	3
CO2	3	2	2	1	1	2	1	2	3	1	3	2	2	2
CO3	3	3	2	2	2	3	1	1	3	3	2	2	3	1
CO4	2	2	2	2	1	3	2	1	2	1	3	2	2	1
Total score	11	9	7	7	7	10	5	7	9	7	10	9	8	7

CORE-II–TEXTILE AND APPAREL QUALITY EVALUATION

Course Outcomes (COs)

CO1	Explain the importance of quality standards, ISO systems, and total quality management practices in the apparel industry.	K1 and K2
CO2	Identify eco-specifications, restricted substances, and testing requirements used in textiles and garments for maintaining product safety and compliance.	K3
CO3	Analyze garment defects and evaluate quality control procedures followed in cutting, sewing, finishing, packing, and garment testing processes.	K4
CO4	Develop appropriate quality assurance practices including care labelling, inspection procedures, AQL, statistical process control, and supply chain quality management in apparel production.	K5 and K6

UNIT–I

Introduction to Quality Standards, importance of Quality, British standards and ISO Standards for the Apparel Industry. Brief study about ISO 9000 Standards and ISO 14000Standards.Total Quality management systems.

UNIT–II

Eco specification and restriction in apparel and textiles –Dry cleaning using Ozone depleting chemicals, pH values, Formaldehyde contents, Heavy metal contents, Pesticides and Herbicides, Azo dye stuffs, Nickel, Penta chloro phenols, colour fastness, brightener‟s and Softening agents.

UNIT–III

Garment defects –Quality followed in cutting department –sewing department–Finishing and Packing departments.

Testing of Garments–Seam strength –Seam properties of Knitted fabrics. Bow and Skewness in woven and Knitted fabrics. Soil/Stain release testing. Testing of Sewing Threads.

UNIT–IV

Introduction to care labels – importance of care labels- Information in care labels-Care labelling symbols -Care labelling Systems- Advantages and disadvantages American, British and International Labelling. Eco-labelling-Quality and placing of care label in the garment.

UNIT–V

Quality Control and Assurance-Introduction-Quality Costs and Customer Returns-Difference between Quality Assurance and Quality Control- Inspection Procedure- Acceptance Quality Level (AQL)-Implementing Quality Control- Advanced in Quality Control- Integration of technology in quality control-Statistical Process control and control chart- Quality control in the supply chain and vendor management.

REFERENCES

1. An Introduction to Quality control for Apparel Industry byP V Mehta.
2. ApparelQualityControlbyK.Sukumar,G.S.Sivakumar,.S.S.MITTStaffandStudents cooperative stores.
3. Management Quality in Apparel Industry by P V Mehta.
4. Physical Testing and Quality control,vol123,No.1/2/3textile institute(1993).

CO- PO & PSO Mapping Matrix

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	3	2	1	1	2	2	1	3	2	1	2	1	1	2
CO2	2	3	2	2	2	3	2	2	3	2	1	2	1	2
CO3	2	3	3	3	2	2	2	2	2	3	2	2	1	2
CO4	3	3	2	3	3	2	3	3	2	2	3	2	2	3
Total	**10**	**11**	**8**	**9**	**9**	**9**	**8**	**10**	**9**	**8**	**8**	**7**	**5**	**9**

CORE III- ADVANCED GARMENT CONSTRUCTION PRACTICALS

Course Outcomes (COs)

CO1	Explain the principles of designing garments for children, women, men, and special purposes by considering fabric, comfort, fit, and function.	K1 and K2
CO2	Apply pattern making, cutting, stitching, and finishing techniques in the construction of different types of garments.	K3
CO3	Analyze the suitability, durability, comfort, and aesthetic features of garments for various users and occasions.	K4
CO4	Evaluate and develop appropriate garments for special needs such as maternity wear, elderly wear, physically challenged wear, and protective medical suits.	K5 and K6

Designing, Constructing and Evaluating the Garment

1. Children’s Garment -Frock/Middy& Middy Top/Footer Pyjamas
2. Women’s Garment -Salwar kameez /Maxi/Western Gown
3. Men’s Garment -Shirt/ Kurtha/ TShirt

4. Special Purpose Garment 1 -Physically challenged/Old Age People/Maternity& Lactation Period.
5. Special Purpose Garment 2 -Full protected Medical suit with hand glows ,Mask And foot covers.

TEXTBOOK

Practical clothing construction-PartI &PartII MaryMathews,cosmic Press, Chennai-1986.

1. Zarapkarsystem ofcutting,K.R.ZarapkarNavneet EducationLimited, Silvassa.
2. PracticalDressDesign,byMabelDeaneErwin,1954revisededition,MCMILLAN Company, NewYork

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1. https://style2designer.com/apparel/adaptive-clothing-best-for-physically-disabled-fashion-lovers/
2. Clothing and textiles for disabled and elderly people Harriet Meinanzer & Minna Varheenmaa VTTP rocesses.

CO- PO & PSO Mapping Matrix

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	3	3	1	1	3	2	2	3	2	3	3	2	1	2
CO2	2	2	3	3	1	2	3	1	3	3	1	3	2	1
CO3	2	1	3	1	3	2	1	2	2	1	3	2	1	1
CO4	1	2	1	2	2	3	2	1	1	2	2	1	3	2
Total	8	8	8	7	9	9	8	7	8	9	9	8	7	6

ELECTIVE I A– SUSTAINABILITY IN TEXTILE AND FASHION

Course Outcomes (COs)

CO1	Understand the concepts of fashion, sustainability, and sustainable fashion including social, economic, and environmental concerns.	**K1 and K2**
CO2	Analyze the environmental and social impacts of fashion and assess clothing lifecycle, fast vs slow fashion, and sustainable business models.	**K3**
CO3	Apply strategies of recycling, upcycling, zero-waste design, and Product-Service Systems (PSS) to promote sustainable fashion practices.	**K4**
CO4	Evaluate sustainable fashion initiatives, green consumerism, and corporate strategies, proposing solutions to enhance environmental and social responsibility in the fashion industry.	**K5 and K6**

UNIT I

Introduction- Fashion, Sustainability, Pillars of sustainability. Sustainable fashion- Meaning-Importance-Need- Social, Economic and Environmental concerns related to fashion -Business models for sustainable fashion-Sustainable clothing- Sustainable consumption practices for enhanced product life. Sustainability in fashion-Benefits and challenges.

UNIT II

Recycling and upcycling- Concepts and benefits- Carbon footprint, water footprint and energy consumption of fashion industry. Sustainability in Clothing Industry -Clothing lifecycle, fast and slow fashion, clothes repair and re-use. Value and Green aesthetics- Ethical design- Concept of Zero waste fashion design-Product service system (PSS) for sustainable fashion- PSS design thinking and PSS consumer adoption - Multi-life Garments through Modular Structures and Supplemental Services Consumer engagement and business innovation. Sustainable fashion designers, sustainable fashion brands, Eco- friendly fashion labels.

UNIT III

Fashion and Environment –Fashions environmental impact - Water pollution, water consumption, Micro fiber pollution, Waste and disposal, chemical usage, carbon emissions, soiled gradation. Reducing environmental impact in fashion industry-buy less,

buy clothes from sustainable brands, buy better quality, think before disposal, buy second hand, swap and rent clothing, cloth washing practice.

UNIT IV

Green consumerism -Meaning-Importance- green consumerism and waste reduction- Green consumer – Possible ways to becomegreenconsumer-GreenMarketingStrategies.3Rs–Reduce, Reuse and Recycle. Ways to increase the sustainability of fashion -Raise awareness, Radical Rethinking, Increase corporate and consumer responsibility, Push for alternatives, Introducing effective policy.

UNIT V

Sustainable Business Strategies- Environmentally Friendly Operation Strategies - Design for environment, environmental management systems, product stewardship programs, supply chain management, total quality management and Just-in-time. Marketing Mix for Green Products-Product, place, promotion, price. Product Life Cycle in Fashion Industry-Materials, Production, Distribution and Transportation, Product Use ,End of Use. Textile recycling Available recycle options- convenience of recycle options- Re- design solution package. Consumer behaviors and attitudes- Media and information reliability, green clothes and information credibility.

TEXT BOOK

1. Kate Fletcher, Sustainable Fashion and Textiles, Published by Earth scan in the UK and USA in 2008, ISBN-13: 978-1-84407-463-1 Hardback ISBN-13: 978-1-84407-481-5Paperback.

REFERENCES

1. SUSTAINABLE TEXTILES, Antonela Curteza, www.2bfuntex.euMDT Sustainable Textiles.
2. https://books.google.co.in/books/about/Sustainability_in_the_Textile_and_Apparel

CO- PO & PSO Mapping Matrix

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	3	1	2	1	2	3	1	2	1	1	1	3	1	2
CO2	3	3	3	1	1	2	2	3	1	1	1	3	1	3
CO3	2	3	3	1	2	3	2	3	3	3	2	2	3	2
CO4	2	3	3	2	1	3	3	3	3	3	3	3	3	3
Total	10	10	11	5	6	11	8	11	8	8	7	11	8	10

ELECTIVE- I B DESIGN RESEARCH

Course Outcomes (COs)

CO1	Students will be able to explain what design research is, its purpose, types of briefs, and sources of inspiration.	**K1 and K2**
CO2	Students will be able to collect primary and secondary research, document it using sketchbooks, collages, and concept boards, and identify key design elements.	**K3**
CO3	Students will experiment with materials, fabric qualities, modeling, draping, and recycled garments to develop initial design concepts.	**K4**
CO4	Students will develop, refine, and present a collection using sketches, working drawings, collages, and layouts to convey concept, mood, and story.	**K5 and K6**

UNIT–I

Design Research what and why-Brief, Types of brief, Research and its purpose, where do you find Design research: Choosing a theme or concept, primary sources and secondary sources, sources of inspiration

UNIT–II

How to compile design research- The sketch book, drawing, collage, juxtaposition, deconstruction, cross-referencing, analysis of research, focus on key elements, Mood, story and concept board.

UNIT–III

Three dimensional approaches to research-Model and drape, fiber and fabric qualities, recycled garment manipulation

UNIT–IV

Designing from your research- Bridging the gap, Design development elements, ideas generating exercise, development and refinement of individual garments, selecting and editing ideas to form a collection.

UNIT–V

Communicating ideas- Sketching and design drawing, Templates, Collage, working drawings, art materials, layout and composition, illustration.

REFERENCES

1. BasicsFashionDesign01:ResearchandDesign,SimonSeivewright,A&CBlack,2012
2. BasicsFashionDesign04:DevelopingaCollection,ElinorRenfrew,ColinRenfrew, AVA , Publishing, 2009.
3. DoingResearchinFashionandDress:AnIntroductiontoQualitativeMethods, Yuniya Kawamura,Berg, 2011 .
4. BasicsFashionDesign05:Fashion Drawing,JohnHopkins,AVAPublishing, 2009
5. FashionDesignResearch,EzinmaMbonu,LaurenceKingPublishing,2014.

CO- PO & PSO Mapping Matrix

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	3	3	1	2	1	1	2	3	2	2	1	1	2	2
CO2	2	3	2	2	1	3	1	2	3	2	2	1	3	3
CO3	2	2	3	3	2	1	1	2	2	3	3	2	3	2
CO4	2	2	3	3	3	2	2	2	2	3	3	3	1	1
Total	9	10	9	10	7	7	6	9	9	10	9	7	9	8

ELECTIVE-II A - CAD IN FASHION DESIGNING PRACTICALS

Course Outcomes (COs)

CO1	Understand the basic principles of pattern making and garment construction for different types of apparel.	K1 and K2
CO2	Apply drafting techniques to develop basic patterns for kids' and women's garments.	K3
CO3	Analyze garment styles and perform pattern modification and grading for different sizes (S, M, L, XL).	K4
CO4	Evaluate and create optimized markers and lay plans to improve fabric utilization and marker efficiency.	K5 and K6

PART-A

DESIGN AND DEVELOP THE PATTERN FOR THE FOLLOWING STYLE KIDS WEAR

- A-Line/Yoke frock
- Baba Suit
- Knickers

WOMEN'S WEAR

- Blouse
- Salwar Kameez
- Skirt and Top

WOMEN'S WEAR

- Basic Shirt

- T shirt
- Trousers

PART-B

- Grade the patterns to S, M,L, XL and estimate the lay length and marker efficiency.
- File the pattern style and apply the grade rule.
- Estimate the lay length and marker efficiency

CO- PO & PSO Mapping Matrix

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	3	2	1	0	3	2	1	3	2	1	3	4	3	1
CO2	2	3	2	1	2	3	4	2	3	2	1	3	3	3
CO3	1	2	3	2	1	4	2	1	2	3	2	1	2	3
CO4	3	1	2	3	2	1	3	4	1	2	3	2	1	2
Total	9	8	8	6	8	10	10	10	8	8	9	10	9	9

ELECTIVE-II B - GENERIC FASHION SKETCHING PRACTICALS

Course Outcomes (COs)

CO1	Identify and describe the basic components of fashion figure drawing such as head, torso, limbs, and gesture lines.	K1 and K2
CO2	Construct 10-head and 12-head fashion figures using stick, block, and flesh figure methods with correct proportions.	K3
CO3	Interpret body posture and convert gesture drawings into different fashion poses such as straight pose, S-curve, and T-pose for garment design.	K4

CO4	Develop complete fashion illustrations using shading, color pencil rendering, and finishing techniques for garments, accessories, and home furnishing items.	K5 and K6

- Illustrate a gesture components part from head to toes.
- Create a 10 head stick figure, block figure and flesh figure and convert pose to garment like straight pose, 'S'curve, open pose "T'pose**.**
- Stylized illustration in 10 head flesh figure–garments force field.
- Create a contemporary style garment in12 head theory.
- Freehand and drawing techniques.
- Model drawing by using pencil shade.
- Still drawing using color pencil shading.
- Develop live model drawing.
- Draw a fashion figure in 2Dand 3Dform using finishing techniques.
- Fashion accessory drawing.[any 5 items]
- Creation of Home Furnishing items.[any5 items]

REFERENCE BOOKS

1. Abling Bina,Fashion sketchbook, Fairchild publishers, New York2.Seaman Julian, Professional Fashion illustration, B.T.Batford Ltd, London.3.IrelandPatrickJohn,Fashionillustration,B.T .BatfordLtd,London.

4.AllenAnneSeamanJulian,FashionDrawing-Thebasicprinciples,B.T.BatfordLtd,London.

CO- PO & PSO Mapping Matrix

CO	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	**PSO6**	**PSO7**
CO1	3	2	3	2	3	1	2	3	2	3	2	1	1	2

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO2	3	3	2	1	2	3	3	3	3	2	3	1	2	3
CO3	2	3	3	2	2	1	2	2	3	3	2	3	1	2
CO4	2	2	3	3	3	2	1	2	3	3	3	2	2	1
Total	10	10	11	8	10	7	8	10	11	11	10	7	6	8

SEMESTER – II

SEMESTER-II

CORE IV – FASHIONMERCHANDISING

Course Outcomes (COs)

CO1	Explain the fundamental concepts of fashion merchandising, including terminology and the roles of different types of merchandisers.	K1 and K2
CO2	Illustrate the roles, responsibilities, and skill sets of fashion buyers and merchandisers, and differentiate between own-label and branded merchandising.	K3
CO3	Analyze the structure and functioning of buying and merchandising departments, including coordination across the fashion value chain.	K4
CO4	Develop merchandising strategies including budgeting (KPI, OTB, stock, margins), range planning, allocation, and e-retailing operations to optimize retail performance.	K5 and K6

UNIT-I

Introduction to Merchandising:

Merchandising terminology-role and responsibilities of merchandiser - types of merchandisers- fashion merchandiser, export merchandiser, retail merchandiser and visual merchandiser.

UNIT-II

Roles of buyer and merchandiser: Rights of fashion merchandising- roles of buyer-skill set of good fashion buyer- role of fashion merchandiser - skill set of good fashion

merchandiser-own label versus branded buying and merchandising-fashion buyer and merchandiser job description

UNIT-III

Organizing the buying and merchandising function: Structure of buying and merchandising departments - Assistant buyer - buying administration assistant – assistant merchandiser - allocator - buyer and the key contact - merchandiser and their key contact –meeting schedules -how buyer & merchandiser work with other activities in the value chain

UNIT-IV

Fashion Merchandising Budgeting :

KPI budgeting-sales turnover budget- mark down spending budget –in take margin budgeting- stock target budgeting

Fashion Merchandising: Open to buy : What is open to buy-creating an open to buy budget -open to buy budgeting process

Fashion merchandising range planning: Introduction to range planning -range plan- optional plan- qualitative and quantitative aspects-range planning process

UNIT-V

Fashion merchandising: Sizing, deliveries and allocation:

Merchandiser supplier relationship, size curves, initial locations-managing purchase orders and deliveries

Trading : Planning versus trading, repeats and cancellations ,promotional planning, end of season sale

E-retailing: E-retailing and product management, E-retailing and stock management and E- retail and drop shipping activities

REFERENCES

1. DavidShaw,T.J.MasteringFashionBuyingandMerchandisingManagement,16-Nov-2000-Business&Economics.

2. PalgraveMacmillan,J.C.FashionMerchandising,PrinciplesandPractic e,28-Nov-2014- Business&Economics.
3. TataMcGraw,P.RetailMerchandising ,Hill Education ,2010.

PO & PSO Mapping Matrix

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	3	2	1	2	2	3	1	3	2	2	3	2	2	2
CO2	2	3	2	1	3	2	1	2	3	2	1	3	3	2
CO3	1	2	3	2	3	1	2	2	2	3	2	3	1	2
CO4	2	3	2	3	3	2	3	1	2	3	3	2	2	3
Total	8	10	8	8	11	8	7	8	9	10	9	10	8	9

CORE-V

TECHNICAL TEXTILES

Course Outcomes (COs)

CO1	Explain the fundamentals of technical textiles, including definitions, classification, and types of technical fibres used in various industries.	K1 and K2
CO2	Identify and classify different technical textile applications in medical, agro, build, geo, and industrial sectors with appropriate fibre selection.	K3
CO3	Analyze the properties, functions, and performance characteristics of fibres used in protective, medical, and mobile technical textiles.	K4
CO4	Evaluate and interpret the role of smart textiles, sports textiles, and advanced fibre technologies in modern industrial and real-world applications.	K5 and K6

UNIT–I

Technical Textiles: Definition, developments in fibres used in technical textiles, Applications of technical textiles, Globalisation and Future of technical textiles industry. **Technical Fibres:** High–Strength and high- modulus organic fibres, high chemical and combustion - Resistant organic fibres, high performance in organic fibres, ultra-fine and novelty fibres.

UNIT–II

Medical Textiles: Classification – fibres Used. Non –Implantable, implantable, Extra Corporeal Devices, Health Care and Hygienic Products. **Agro Textiles**–Introduction, Fibres Used, types, functions and properties, characteristics and applications of Agro textile products.

UNIT III

Build Tech - Introduction, Fibres Used, types functions and properties characteristics and applications in Architecture and in Building Construction. **Geo textiles**– Introduction, Fibres Used, type's functions and properties characteristics and applications in its Field. **Indu Tech** –Introduction, Fibres Used, types, functions and properties, characteristics and applications–Theory of Dust Collection.

UNIT–IV

Protective Textiles: Introduction, Fibres Used, types functions and properties, characteristics and applications fire protective clothing, heat resistant garments, water proof Materials, ballistic resistant vest. Biological and Chemical Vest, Military protective Clothing .**Mobil tech Textiles** -Introduction, Fibres Used, types functions and properties, characteristics and applications of mobile tech, applications in all kinds of road transport vehicles, rail and aircrafts.

UNIT– V

Sports Textiles: Introduction, fibers used, Types, functions and properties, Characteristics and Applications of Sports Tech. **Smart and intelligent Textiles** - Classification -Active smart, passive smart and very smart textiles and phase change materials shape memory polymers, chromic and conductive materials and its applications in various fields.

REFERENCES

1. Dr. V. K. Kothari, Technical Textiles, Technology, Developments and Applications ,IAFLPublications, NewDelhi, (2008).
2. H.Mattila,IntelligentTextilesandClothing,PublishingLtd,England,(2006).

3. JWSHearle,HighPerformanceFibres,WoodheadPublishingLtd,England,(2001).

4. RSenthilKumar,TextilesforIndustrialApplicationsCRCPress(2013).

5. SabitAdanur,WellingtonSearsHandbookofIndustrialTextilesCRCPress(1995).

CO- PO & PSO Mapping Matrix

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	3	2	1	3	2	3	2	3	2	1	2	2	2	2
CO2	3	2	2	1	2	2	2	2	3	2	1	2	1	2
CO3	2	3	3	2	2	2	3	2	3	3	2	1	3	3
CO4	2	3	3	3	2	1	3	1	2	3	3	2	1	1
	10	10	9	9	8	8	10	8	10	9	8	7	7	8

CORE VI –CAD IN TEXTILE DESIGNING PRACTICALS

Course Outcomes (COs)

CO1	Understand and describe basic and advanced weave structures such as plain weave, twill variations, huck-a-back, honeycomb, and mock leno.	K1 and K2
CO2	Analyze different weave patterns and distinguish their structural characteristics and visual effects.	K3
CO3	Apply weaving principles to construct weave drafts and design stripe and checked fabric patterns.	K4
CO4	Design saree border, pallu, and bodice patterns using textile design	K5 and K6

	principles in Adobe Illustrator/Photoshop.	

Create weave patterns for the following weaves:

- Plain
- Twill–2/1twill,1/2twill,3/1twill,1/3twill (2/1,2/3twill)
- 3/3-pointedtwill
- 3/3Herringbonetwill
- Combined twill weave
- Huck a back
- Honey comb-ordinary & brighter honey comb
- Mock leno

2. Create the following weave pattern based on design
    - Striped pattern– pinstripe ,Bengal stripe, bar stripe, barcode stripe
    - Checked pattern – checker board, Madras checks, Tartan checks
3. Design a saree border, pallu and bodice design using **Adobe Photoshop /Adobe Illustrator software**

CO- PO & PSO Mapping Matrix

CO / PO-PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	3	2	1	1	1	1	1	3	2	1	1	1	1	1
CO2	2	3	2	1	1	1	1	2	3	2	1	1	1	1
CO3	2	2	3	2	2	1	1	2	2	3	2	2	1	1
CO4	1	2	3	3	2	2	1	1	2	3	3	2	2	1

ELECTIVE III A–IMPORT EXPORT MANAGEMENT AND DOCUMENTATION

Course Outcomes (COs)

CO1	Understand the basic concepts, principles, and institutional framework of international trade and export-import management.	K1 and K2
CO2	Explain export and import procedures, documentation requirements, and regulatory formalities involved in international trade.	K3
CO3	Analyze trade policies, export incentives, and government support systems to evaluate their impact on export performance.	K4
CO4	Apply export-import knowledge in real business situations involving documentation, finance, and trade operations for decision-making.	K5 and K6

UNIT I

Import Export Management Introduction; Concept Key Feature; Foreign Trade-Institutional Frame work and Basics; Trade Policy; Foreign Trade- Simplification of Document; Reduction in Document to Five for Custom Purpose – Exporting and Importing Counter Trade- Promise and Pit fall of Exporting; Improving Export Performance – Counter Trade.

UNIT II

Export Procedures - Preparation for exports: Registration of firms with authorities, PAN No., IE code, BIN No., EPC, Central Excise etc,.- Category of exports: Direct, indirect, third party exports.- Category of Exporters: Manufacturer exporter, merchant exporter, EOU/SEZ/- Five types of Export Houses-Export benefits: Duty drawback, advance authorization scheme, duty free import authorization, duty exemption entitlement scheme, EPCG, duty entitlement pas book scheme, market development assistance - GSP and GST Prules as per the FT policy.

UNIT III

Import Procedures – Import management, procurement planning, and project imports regn.-Identification, selection of suppliers- Purchase contract, terms of payments-Terms of Delivery Inco terms- Import policy ITC HS- Role of a customs house agent and freight forward agents-Type of customs duties, valuation rules- Complete documentation and procedures for import clearance at sea port- Customs clearance of imports by sea and air documents, procedures. Etc.-Imports under various imports notification issued by customs.

UNIT IV

Export Assistance of India: Introduction, Importance of Export Assistance, Export Promotion Measure in India- Expansion of Production Base for Exports; Relaxation in Industrial Licensing Policy /MRT/ FER/ Foreign Collaborations; Liberal Import of Capital Goods; EPZ/EOU- Assured Supply of Raw-Material Imports- Eligibility for Export/ Trading/ Star Trading/ Super Star Trading Houses- Export Houses Status for Export of Services- Rendering Exports Price Competitive; Fiscal Incentives; Financial Incentives; Strengthening Export Marketing Effort.

UNIT V

Export documentation –Introduction and various types of export documents– Pre- shipment and Post-shipment documents – Pre-Shipment and Post-Shipment finance. Conditions in LC for stipulated documents legalization shipping consignment certificates. Export duty draw back– pass book – capital goods import license and assistance. Types of bill of ladings.

TEXTBOOKS

1. Export import procedures, C.Ramagopal, New Age International (P) Limited, Publishers New Delhi.
2. EXPORT/IMPORTPROCEDURESandDOCUMENTATION,ThomasE.JohnsonAndDonnaL.Bade,American Management Association,New York.
3. ForeignTradeTheory,Procedures,PracticesandDocumentation,Dr.KhushpatS.Jain,Himalaya PublishingHousePvt.Ltd, New Delhi.
4. Export-Import Theory, Practices and Procedures, Belay Seyoum, PhD, SECONDEDITION,Routledge, New York.

REFERENCES

1. Export Import Policy, Publisher:Ministry of Commerce, Government of India,NewDelhi.
2. Electronic Commerce by N. Janardhan, Publisher:Indian Institute of ForeignTrade,NewDelhi.
3. Nabhi's New Import Export Policy,Publisher :Nabhi Publication,NewDelhi.
4. Export-What,Where, How by Ram Paras, Publisher: Anupam, Delhi.
5. Import Export Management ,EIILM University, Sikkim.

CO- PO & PSO Mapping Matrix

COs \ POs & PSOs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	3	2	1	1	1	1	2	3	2	1	1	1	1	2
CO2	3	3	2	2	2	1	1	3	3	2	1	2	1	1
CO3	2	3	3	2	2	2	1	2	3	3	2	2	2	1
CO4	2	3	3	3	3	2	2	2	3	3	3	3	2	2
	10	11	9	8	8	6	6	10	11	9	7	8	6	6

ELECTIVE III B - APPAREL MACHINERY OPERATIONS AND MAINTENANCE

Course Outcomes (COs)

CO1	Explain the evolution, types, and basic functioning of sewing machines used in domestic and industrial applications.	**K1 and K2**
CO2	Classify sewing machines based on technical characteristics such as stitch type, feed mechanism, bed type, and automation systems.	**K3**
CO3	Apply knowledge of garment quality parameters and quality assurance practices to identify defects and ensure stitching quality.	**K4**
CO4	Evaluate in-line inspection methods and machine maintenance practices to improve production efficiency and workplace safety.	**K5 and K6**

Unit I

Introduction to Sewing Machines

Introduction- Evolution of the sewing machine- Types of sewing machines- Mechanical, Electrical and Computerized sewing machines. Categories of sewing machine - Domestic and Industrial sewing machines –characteristics and features.

Unit-II

Sewing Machines

Classification of sewing machines-General sewing machines and sewing machines based on technical characteristics. General- sewing machines, Special sewing machines, sewing automata, sewing systems, Numerical controlled, robotic sewing machines. Technical -stitch type, sewing needle, feed mechanism, bed type- Characteristics and features- working principle -precautions. Advanced sewing machines in industry- sewing machine brands.

Unit-III

Garment quality in Stitching Operations

Garment quality -factors contributing quality product-raw material quality, accessories, cutting quality, Inspection procedure in sewing department, machine and sewing quality, Washing and finishing quality.

Functions of quality assurance in sewing department - Role and responsibility of Quality assurance manager. Standard quality levels Fault free fabric, Good stitching and seam formation, Machine conditions, needle size, and thread, trims and fasteners -Job cord

meaning - Importance of job card or work ticket- job card specification -garment components, stitch specification.

Unit-IV

In-line Inspection

In-line inspection – Meaning - Format of inline checking - checking at check points, Roving quality checking, Traffic light System, inspection by buyer. Types of in-line inspection -Purpose- In-line Inspection report – Defect list- Defect classification zones - Most noticeable, Average noticeable, least noticeable. Specifications of quality department - Swatch cards, specification sheet, trim cards.

Unit-V

Care and Maintenance

Cleaning and Maintenance of tools - Cleaning and oiling of sewing machines- Handling of sewing machines -Safe and correct procedure of handling equipment and machinery - Clothing and Personal Protection, Clear demarcations and sign boards, Compliance towards – Noise Protection, Cleanliness and maintenance, Reporting an Accident, Essential facilities required at the workplace- Potential hazards risks and threats based on nature of operations.

TEXTBOOKS:

1. Harold Carr and Barbara Latham, The Technology of Clothing Manufacturing, Om Book Service, New Delhi, 2010.
2. Dudeja, V.D., Professional Management of Fashion Industry, Gangandeep Publication, New Delhi, 2005.

Reference Book:

1. Gerry Cooklin, Garment Technology for Fashion Designers, Black Well Science Ltd., Oxford, 2005.
2. Betsy hose good, The Complete Book of Sewing, Dorling Kindersley Limited,London, 2006
3. Karthik T., Ganesan P., Gopalakrishnan, D, Apparel Manufacturing Technology, CRC Press, U.S., 2016.
4. Debbie Colgrove, Sewing, Wiley Publishing, Inc., Hoboken, New Jersey, 2006.

CO- PO & PSO Mapping Matrix

COs \ Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	3	2	1	2	1	3	2	3	2	1	3	2	3	3
CO2	3	3	2	1	1	3	2	3	3	2	1	2	3	2
CO3	3	2	3	2	2	1	3	3	3	3	2	1	2	2
CO4	2	2	3	3	2	2	1	2	3	3	3	2	1	1
	11	9	9	8	6	9	8	11	11	9	9	8	9	8

ELECTIVE IVA - ENTREPRENEURSHIP DEVELOPMENT IN TEXTILES

Course Outcomes (COs)

CO1	Understand the fundamentals of entrepreneurship, its types, functions, and environmental influences.	K1 and K2
CO2	Analyze and develop a business plan for a new venture, including ownership, financial formalities, and resource planning.	K3
CO3	Evaluate factors affecting plant location, layout, safety, ergonomics, and material management.	K4
CO4	Develop strategies for managing small businesses using support institutions, government schemes, tax planning, and management functions.	K5 and K6

UNIT I

Entrepreneurship: Meaning – Analysis – Types and Functions –Growth of entrepreneurs in India – Influence of Environmental Factors – Help in EDP – training and development of entrepreneur. Entrepreneurship development programme –role of entrepreneurs in development of apparel and fashion industry, entrepreneurship with reference to fashion and apparel industry in India.

UNIT II

Business planning–starting a new venture r**e**lated to apparel industry, essentials of a successful center. Formalities involved in starting up of a firm. Ownership details – individual proprietor / partnership / PVT. Limited company and public Ltd Company, bank formalities, term loan, working capital, project financing**.**

UNIT III

Location and plant layout – factors influencing plant location, building structure, lighting, ventilation, material handling, availability of labor, material management and transportation. Plant layout, ergonomics safety and security to be considered while planning the layout.

UNIT IV

Role of support institutions and management of small business: Director of industries – DIC,SIDCO, SIDBI, SIDC, SISI, NSIC, NISBUD, State Financial Corporation Sic, Financial assistance by central government through MSME scheme, PMYK scheme, MUTHRA Scheme in detail. Subsidy schemes supporting for apparel industry by AEPC, ATDCPEDEXCIL, Marketing Management, Production Management, Finance Management ,Human resource Management, Export Marketing,

UNIT V

Industrial Sickness and remedies, tax planning, GST, patent rules, factory ACT, minimum wages, knowledge of exemptions and deductions, Environmental considerations and social responsibilities

REFERENCE BOOKS

1. Desai Vasani, Small scale industries and entrepreneurship, Himalaya PublishingHouse,Delhi, 2003.
2. KaulAruna,Entrepreneurshipmanagement,VikasPublishingHouse,Delhi,2003.
3. Cynthia L. Greene, Entrepreneurship ideas in Action, Thomson Asia PVT Limited,2004.
4. DavidOtes,AguidetoEntrepreneurship,JaicoBooksPublishingHouse,Delhi,2004.

CO- PO & PSO Mapping Matrix

COs ↓ / POs & PSOs →	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	**PSO6**	**PSO7**
CO1	3	2	1	2	2	3	1	3	1	1	2	2	3	3
CO2	2	3	3	1	1	3	2	2	3	4	4	3	2	2
CO3	2	2	2	3	1	1	3	2	2	3	1	1	3	2
CO4	1	2	2	2	3	2	2	1	2	2	3	2	1	1
	8	9	8	8	7	9	8	8	8	10	10	8	9	8

ELECTIVE IV B- COMMUNICATION FOR FASHION BUSINESS

Course Outcomes (COs)

CO1	Understand the fundamentals of communication, its types, importance, and its role in business and corporate communication.	K1 and K2
CO2	Apply listening skills and technical writing techniques to prepare and	K3

	interpret business documents such as reports and proposals.	
CO3	Analyze and demonstrate effective meeting management and presentation skills in professional contexts.	K4
CO4	Develop professional business correspondence including letters, emails, resumes, and other formal communication documents.	K5 and K6

Unit I

Communication

Communication- meaning, Importance and purpose, role of communication in business, main forms of communication business. Types of Communication-Forms of Communication.-Verbal and non- verbal communications - Technology and Business Communication, Communication in Management, effective communication at workplace – Barriers. Corporate communication

Unit-II

Listening

Listening-Definition-Listening Process-Types-Superficial, Appreciative, Focused, Attentive Evaluative, Empathetic-Barriers- Traits of a good Listener, factors contributing to poor listening, Active listening.

Technical Writing-Importance, Characteristics. Report writing- objectives and types.

Business proposals-definition, types. Note making and writing technique.

Unit-III

Meetings, Presentation skills

Meetings – Types, Characteristics, Conducting Meetings, Effective meeting, communicating through Visuals.

Presentation skills- Definition, Importance, features of a good presentation, components of presentation skills-Planning effective presentation- -Analyze the audience, Structure, verbal delivery, Body language and movement, form of language, equipment's and facilities, verbal and nonverbal, Interacting with audience and managing questions, Rehearsal - Network Etiquette

Unit-IV

Business Correspondence

Business Correspondence -Meaning and significance-Principles-Essentials of Business letters- - introduction, format and layout -E-mail- report writing,-writing skills - Elements of business letter- Formats - Types of business letter-Internal, External, Routine, Sales, Personalized, Circulars.

Unit-V

Letter Correspondence

Letter Correspondence- Introduction, Objectives- - Requirement correspondence definition, application letter, contact of resume and CV, interview letter, offer of employment, letter of acceptance, resignation letter, letter of recommendation.

TEXTBOOKS

R.C Bhatia, Business communication, Ane's books Pvt Ltd, New Delhi, 2009

1.Krishna Mohan and MeeraBanerji, Developin communication skill, Trinity pres: Lakshmi publication Chennai, 2016.

2. Mary Ellen guffey , Essentials of communication, south – western collage Publication Association for business communication, 2018.

3. PoojaKhanna, Business Communications, Vikas Publishing House Pvt .Ltd..Noic

CO- PO & PSO Mapping Matrix

CO / PO / PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	3	2	1	2	3	1	2	3	1	2	2	3	3	2
CO2	2	3	3	2	3	2	2	2	3	1	3	2	3	3
CO3	1	2	3	3	2	2	3	1	2	3	3	1	2	3
CO4	1	1	2	3	3	2	1	1	1	2	3	3	2	2
	7	8	9	10	11	7	8	7	7	8	11	9	10	10

SKILL ENHANCEMENT COURSE I
SURFACE ORNAMENTATION PRACTICAL

Course Outcomes (COs)

CO1	Recall and identify different garment ornamentation techniques such as dyeing, printing, embroidery, smocking, lace, appliqué, and embellishments.	K1 and K2

CO2	Explain the principles of surface enrichment and appropriate placement of techniques on garments (neckline, sleeves, waistline, hemline, collars, plackets, pockets).	K3
CO3	Apply various ornamentation techniques creatively on children's, women's, and men's garments through design development.	K4
CO4	Analyze and evaluate design effectiveness, combining multiple embellishment techniques to produce aesthetically pleasing and functional garments.	K5 and K6

Part – A

Develop designs on garments for surface enrichment of neckline/waistline/sleeves/bottom hem line/collars/plackets/around buttons or button hole/arm line/pockets using the below embellishment techniques.

PART – B

Design and develop any two children, Women's and men's garments suitable for designing and application of ornamentation techniques.

1. Dyeing - Tie and dye/ Batik
2. Printing – Block/Screen/Stencil
3. Painting
4. Embroidery -Hand/Machine
5. Smocking
6. Lace
7. Appliqué
8. Studs/Beads/sequins/mirror/stone
9. Accessories-Buttons/elastic/cords/tapes/buckles

TEXTBOOK

1. Lucinda Ganderton, Dorothy Wood, The Ultimate Book of Quilting Cross Stitch, Needle craft, Annes Publishing Ltd., London, 2005.

REFERENCES

1. MunniSrivatsava and Bats for, Embroidery Techniques from East & West, London, 2005.

2. Nancy Ziemon, Machine Embroidery with confidence – A beginner's guide Krause Publications, West Indies, 2005.

3.Margo Singer, Textile Surface Decoration- Silk and Velvet, Textile handbook, A&C Black Publishers,
Great ritain, 2007

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CO2	3	3	2	2	2	1	2	3	3	1	1	3	3	2
CO3	2	3	3	3	2	2	1	3	2	3	2	3	2	3
CO4	2	3	3	3	3	2	2	3	3	2	3	2	1	2
	10	11	9	10	8	7	8	12	10	9	8	10	8	9